FLOOD CONTROL OMNIBUS BILL

(TITLE II—H. R. 12080)

[No. 84-18]

HEARINGS

BEFORE THE

SUBCOMMITTEE ON FLOOD CONTROL

AND THE

COMMITTEE ON PUBLIC WORKS

HOUSE OF REPRESENTATIVES

EIGHTY-THIRD CONGRESS

FIRST AND SECOND SESSIONS

ON

H. R. 12080

A BILL AUTHORIZING THE CONSTRUCTION, REPAIR, AND PRESERVATION OF CERTAIN PUBLIC WORKS ON RIVERS AND HARBORS FOR NAVIGATION, FLOOD CONTROL, AND FOR OTHER PURPOSES

Volume 2

(See Volume 1 for Rivers and Harbors Projects and Beach Erosion Projects)

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FLOOD CONTROL OMNIBUS BILL

TUESDAY, MAY 1, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL OF THE
COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10:05 a. m., in room 1302, New House Office Building, Hon. Clifford Davis, chairman of the subcommittee, presiding.

Mr. DAVIS. If there be no objection from the committee we will get started. The Chair considers the subcommittee in session.

We are meeting for the purpose of determining what shall be included in an omnibus flood control bill this session. We have two projects this morning, but it is always customary to begin these hearings by a statement from the Corps of Engineers.

We have Major General Itschner, our long-time friend and an officer in whom we have very great confidence. If you will come around, General, we would like for you to make a general statement.

It is the policy of this subcommittee not to cut off anyone, but we do not like to prolong the sessions. General Itschner is well informed about our methods of procedure so we are going to ask you to comply in keeping with that general rule of the committee. General Itschner.

STATEMENT OF MAJ. GEN. E. C. ITSCHNER, ASSISTANT CHIEF OF ENGINEERS FOR CIVIL WORKS

General ITSCHNER. Mr. Chairman and members of the committee, General Sturgis, the Chief of Engineers, asked me to express his regrets that he is unable to be with you today. He is recovering from an operation and will be back to duty, I feel certain, the first of next week.

Mr. DAVIS. Will you please express to General Sturgis the good wishes of this subcommittee on his recovery. We have been concerned about him and we are glad he is about to return to duty.

Go ahead, General.

General ITSCHNER. Mr. Chairman, I know he will appreciate that expression and I shall certainly deliver it to him this afternoon in the hospital.

The Chief of Engineers has, however, reviewed the statement which I shall make in his name, and it accurately expresses his views.

This marks the opening of hearings on an omnibus river and harbor and flood-control bill for 1956.

Two years ago, in February 1954, I appeared before this committee on the 1954 omnibus bill, which is now Public Law 780, 83d Congress. During this intervening time there has been much activity in

connection with Federal civil works, in continuation of civil works construction and studies, and in the field of water resources policy. In addition, destructive flooding has occurred in various parts of our country to emphasize the fact that our task of controlling floodwaters and putting them to beneficial use is far from complete.

I feel, therefore, that it would be appropriate for me to give you a brief résumé of the status of the civil works program which Congress has authorized upon the recommendations of this committee; of the developing policies, problems, and physical events which have affected it; and of the scope of the new proposals which are before you for consideration.

THE CIVIL WORKS PROGRAM

The present civil works program under the jurisdiction of the Corps of Engineers is the cumulative result of specific authorizations by the Congress for many years past. This program, as you know, includes improvements for navigation, flood control, and related water resources development. It also involves shore protection projects. The total active program, consisting of 3,200 projects, has a total estimated cost of $16 billion. Federal appropriations for this work through fiscal year 1956 have totaled $6.9 billion, leaving $9.1 billion as the amount required to complete the present authorized program. The Congress has shown a continued interest in the prosecution of these improvements, and in most years since the close of World War II, appropriations have exceeded half a billion dollars annually. For the present fiscal year, 1956, the total civil works appropriations, including maintenance and operation of improvements, was $563 million. During the Korean emergency, and the years immediately following, only a few new projects were started each year, but I am pleased to report that this policy has been changed and that the appropriations for fiscal year 1956 included the initiation of 102 new projects.

STATUS OF THE FLOOD-CONTROL PROGRAM

The flood-control segment of the civil-works program dates from congressional authorization of the project for the alluvial valley of the Mississippi River in 1928 and from the first General Flood Control Act of 1936 insofar as the country as a whole is concerned. Thus for the country as a whole the flood-control program is now only 20 years old. These 2 decades have witnessed 2 wars—World War II and Korea—and during these wars and other emergency periods the civil works activity, including flood control, was curtailed.

In this brief period, however, the flood-control program of the Corps of Engineers has grown to become one of the major elements of the Federal public works activity.

The active flood-control program, including the major project for the lower Mississippi River, but excluding multiple-purpose improvements, involves over 760 projects, with a total estimated cost of $6.3 billion. Of this amount $2.6 billion have been appropriated by Congress, leaving a total of $3.7 billion required for completion. If the multiple-purpose projects which serve flood-control purposes are added, the estimated cost of the total authorized flood-control pro-

gram becomes $9.5 billion, of which a total of $4 billion has been appropriated through fiscal year 1956.

The accomplishments of the flood-control program have more than justified its cost. The projects in full or partial operation are preventing flood damages of one-half billion dollars a year and, in addition, producing additional benefits of one-quarter billion dollars a year. The total annual value of this program, which is three-quarters of a billion dollars a year, is being achieved at an annual cost of slightly more than $200 million. The flood-control program is paying off at the rate of more than $3 for every $1 invested—and this does not take into account the values which cannot be measured in monetary terms, such as the saving in life, and the economic security of hundreds of urban communities and farming areas.

Much is left to be done in the field of flood-damage prevention. The potential flood losses in the United States on an average annual basis without flood-control works amount to $900 million a year. These are estimated losses for the main river and major tributary valleys, and do not include flood losses in many small upstream tributaries. The half-billion-dollar reduction in the $900 million annual loss presently being achieved by the operating flood-control program still leaves a balance of $400 million annual loss.

An approximation of the extent to which the various regions of the country have approached the authorized flood-control program is indicated by the following:

	Percent
Alluvial valley of the Mississippi	66
Missouri River Basin	43
Los Angeles area	41
Upper Mississippi River	40
Sacramento-San Joaquin Rivers in California	38
North Atlantic region	35
Ohio River Basin	29
New England area	22

The figures I have just given you are not a complete measure of the extent to which the flood-control problem has been solved in any region, because they are based on the authorized programs. You will recognize that the authorized program of any region by no means fulfills the complete flood-control requirements of that area.

STATUS OF THE MULTIPLE-PURPOSE PROGRAM

The multiple-purpose projects are those which have two or more functions. They may be combinations of flood control, navigation, hydroelectric power development, or any related purposes.

The active multiple-purpose program which may be classified in the flood-control category, as distinguished from the navigation category, consists of 40 projects which have a total cost of $3.2 billion. The total appropriation to date is $1.5 billion, leaving $1.7 billion to complete. Hydroelectric power is an important product of this program. The present installed capacity of all multiple-purpose projects of the Corps of Engineers is more than 4 million kilowatts. The capacity when the projects under construction will have been completed will be 7.6 million kilowatts.

FLOODS AND HURRICANES OF 1955–56

The hurricanes and floods in the Northeast in the late summer and fall of 1955 were more of a catastrophe than had ever been experienced in that area. The damage is estimated at nearly $700 million. More than 200 lives were lost. The location of the 1955 floods was such that some of the projects which had been in the area had no appreciable effect upon them. However, the dams and other structures within the flood areas were extremely effective. For example, the nine completed local protection works on the Connecticut River at Hartford, Conn., Springfield, Mass., and other points, prevented damages of about $33 million. The total Federal cost of these works was about $19 million. Thus, they more than paid for themselves in this one flood. The Knightville Reservoir on the Westfield River in Massachusetts, and the Mansfield Hollow Reservoir in the Thames River Basin both came into action and prevented large damages in the areas below them. Certain authorized flood-control works which have not been constructed would have saved damages greatly exceeding the cost of their construction, even though they could not have prevented all damages in these valleys. Examples are the authorized diversion for the protection of Worcester on the Blackstone River, East Brimfield and Hodges Village Dams in the Thames River Basin, and Thomaston Reservoir on the Naugatuck River. In the North Atlantic area the Bear Creek Reservoir in conjunction with local protection projects at Allentown and Bethlehem, Pa., would have prevented substantial damages.

In December of last year and January of this year floods struck the west coast in Oregon, California, and Nevada. A preliminary estimate indicates damages of more than $150 million from the December flood, which was the largest. As in New England and the North Atlantic area, the damages would have been much higher had not completed flood-control works played their part. It is estimated that the damages which were prevented by the completed flood-control works in Oregon, California, and Nevada amounted to more than $130 million. Some projects prevented damages in excess of their cost, of which an outstanding example is the project for the Sacramento River. The total cost of this project is $65 million. It prevented damages of $90 mililon during the December flood.

THE SURVEY PROGRAM

Appropriations for the general flood-control survey program have been extremely low in comparison with the backlog of surveys. No funds were appropriated for the fiscal year 1952. In the fiscal years 1953 to 1955 the appropriations were at a rate which would have required between 13 and 20 years to complete all reports assigned by Congress. The appropriation for the fiscal year 1956 and the approved budget estimate for the fiscal year 1957 are at a rate which would require 7 years to complete the backlog if no new surveys are authorized. However, the loss of engineers during the lean years experienced in this field cannot easily be made up. The survey program should be maintained on an even keel if efficiency is to be achieved.

STATUS OF REPORTS

The total number of favorable flood-control and multiple-purpose reports which are now before this committee awaiting action is 17. The total cost of the improvements recommended is approximately $390 million. This includes one multiple-purpose project.

There are also 15 navigation reports at a total cost of $20 million, and 4 shore-protection reports costing a half a million dollars.

The total for all favorable reports with Congress, therefore, is 36 in number and $410.5 million in cost.

In addition, there are 43 favorable reports of all types in various stages of processing between the Board of Engineers for Rivers and Harbors and the Congress, having a total cost of about $338 million.

Comprehensive basin plans will require increased authorizations for 11 basins in an amount of $501 million.

The grand total, therefore, for this bill on the foregoing figures will amount to between $900 million and $1,200 million. This compares with the size of the 1954 omnibus bill, which amounted to $1,052 million.

IMPROVEMENT OF REPORTING PROCEDURE

The lapse between submission of a preliminary examination report and initiation of the subsequent survey requires a certain repetition of effort and increase in cost, and also frequent delays of 1 to 2 years in reaching the final conclusions. Much time and some money would be saved in submitting review survey reports on favorable projects, if we could proceed without interruption into the survey phase after preliminary determination that survey studies are worthwhile. A proposal in this direction in the form of a letter to this committee has been sent.

In closing I want to express my thanks to this committee for its help in achieving the harmony which has characterized our relationship and, above all, in working toward the goal of the best development of America's water resources.

That, Mr. Chairman and members of the committee, completes the statement of General Sturgis, the Chief of Engineers.

Mr. Chairman, there are three subjects of interest to this committee on which members have frequently asked questions. They are, first, the question of allocation of costs; second, the determination of a benefit-cost ratio; and, third, the extent of local cooperation. I thought it might be helpful to the committee if I prepared an explanation in layman's language of each of the three subjects that I have mentioned. With your permission, Mr. Chairman, rather than taking the time of the committee, I would like to have those explanations inserted in the record. I think you will find them helpful.

Mr. DAVIS. Without objection, it will be so ordered.

(The document referred to is as follows:)

COST ALLOCATIONS

In a water resource development project serving more than one primary purpose, such as navigation, flood control, irrigation, power and water supply, it becomes necessary to allocate costs among the purposes. This is done in order to determine the amount of local financial participation or to provide a basis for

establishing the sale price of power or water storage space. It has nothing whatsoever to do with a determination of the economic justification of a project, or its benefit-cost ratio. Obviously a final cost allocation can be made only when a project is completed, although it is necessary to make tentative cost allocations based upon estimated costs before the project is started.

Usually it costs something extra to incorporate any purpose in a multiple-purpose project. For instance, an intake structure, penstocks, and a powerhouse with its turbines and generators and a large amount of smaller equipment are required solely in order to include power generation in a project. Usually, too, the dam must be built higher in order to provide storage to be utilized solely for power purposes, and therefore more real estate must be acquired in the reservoir area. These incremental costs of including a purpose in a multiple-purpose project are referred to as the separable costs for that purpose. I believe everyone agrees that the separable costs should be allocated to the purpose for which they are incurred.

But the sum of the separable costs for each purpose in a project usually fail by a substantial percent to equal the total cost of the project. The remainder is called the joint cost, and usually consists of the major cost of the dam proper, much of the real estate inundated by the reservoir, and the cost of other features serving all of the purposes of the dam. The method of distributing these joint costs to the various purposes is the source of most disagreements and misunderstandings on cost allocations.

There are some who believe that power should not share in the burden of bearing the joint costs, on the theory that the flood control dams are required anyway and therefore power should only pay for the separable, or incremental costs. The generating and transmission cooperatives of the Southwest so testified at recent hearings before the Senate Interior and Insular Affairs Committee. However, the three Government agencies most concerned in this subject, the Corps of Engineers, Department of the Interior, and the Federal Power Commission, are in complete agreement that all purposes should share equitably in bearing the joint costs. The difficulty comes in determining what is an equitable share.

Perhaps the simplest method, and certainly a fair one in many cases, would be to divide the joint costs in proportion to the storage provided for each purpose. This method is an acceptable one in some cases, but it has the defect in that it does not recognize that power depends upon head as well as storage, and it is conceivable that a power project could utilize the head provided by a recreation reservoir without any storage specifically reserved for power, and thus not be required to share in the joint costs.

In 1954 the three principal Federal agencies concerned agreed to the use of another method, the "separable costs-remaining benefits" method of cost allocation, as being applicable for most cases. Since that time the Chief of Engineers has used this method exclusively except where authorizing legislation prevented. This method allocates costs in two components: the separable cost, which already has been described to you, and a share of the joint costs determined by the remaining benefits method.

To apply the remaining benefits method of distributing the joint costs, it is necessary first to determine what benefits will accrue to each purpose. However, if there is an alternative method of accomplishing the same purpose which would cost less than the benefits accruing to that purpose, we use the smaller figure. From the amount thus obtained we subtract the separable cost for that purpose, and we have the "remaining benefits" for that purpose. The "remaining benefits" are the excess benefits over the amount required to cover the separable costs, which obviously must be charged to each purpose. Joint costs are then distributed to each purpose in proportion to the remaining benefits for each purpose.

You will observe that the application of the separable costs-remaining benefits method of cost allocation results in each purpose paying a different amount per unit of water storage. In effect, it is akin to our graduated income tax system, where tax is predicated upon the amount of income, which in this case is benefits. However, as a minimum each purpose assumes the incremental cost of including it in the project, so there is no loss, and as a maximum it pays the amount it would cost to produce the same benefits in an alternative project, so there is no danger that the user of a purpose might prefer to build the alternative project.

All who have studied the matter thoroughly agree that the separable costs-remaining benefits method of cost allocation is the most equitable and practicable,

if the basic premise is accepted that all purposes should bear an equitable share of the joint costs. It insures that the advantages usually derived from constructing a multiple-purpose project as compared to a different project for each purpose will be distributed fairly to all purposes. If there is any better, more equitable method of cost allocation, we would like to hear about it, but none has been developed thus far.

In conclusion, I would like to emphasize again that a cost allocation is not a determination of a benefit-cost ratio. It is only the process of distributing the entire cost of a project to the various purposes it serves, without regard to the benefits the project will produce, which generally are greater than the costs. Project payout schedules for those purposes such as power, water supply and irrigation for which reimbursement to the Government is required (without interest in the case of irrigation) are based upon cost allocations. Payout schedules presumably could be established so the Government would make a profit on its projects, with the amount of the benefits or the cost of an alternative project, whichever is less, as the limit. However, it has not been the policy of the Government to make a profit on its water resources development projects. The Chief of Engineers is very anxious, however, that where reimbursement is required that payout schedules conform to the cost allocations, so that over the assumed economic life of the project, which we take as 50 years, full compensation is made to the Government, with interest, except for irrigation. The Government's profit will come after the 50-year period, as many projects will serve indefinitely into the future. It is true that the consumers of the power or water profit by the amount that the benefits exceeds the costs, but they would also if they built the project with their own capital. They generally prefer to participate in a Government project if one is available because of the inherent cost advantages of a multiple-purpose project and the lower Government interest rates and finance charges.

Now let me give you an example of an actual cost allocation, simplified only by rounding off the figures.

Allocation of costs—an actual project for flood control, power, and augmentation of low water flows

[Figures are average annual amounts, rounded off to simplify as an example]

1. Cost of project	$1,800,000
2. Cost of project for flood control and power only	1,800,000
3. Separable cost of low flow augmentation (1 minus 2)	0
4. Cost of project for power and low flow augmentation only	1,200,000
5. Separable cost of flood control (1 minus 4)	600,000
6. Cost of project for flood control and low flow augmentation only	1,400,000
7. Separable cost of power (1 minus 6)	400,000
8. Sum of separable costs (3 plus 5 plus 7)	1,000,000
9. Joint costs (1 minus 8)	800,000

	Flood control	Power	Low flow augmentation	Total
10. Benefits	$2,000,000	$500,000	$100,000	$2,600,000
11. Cost of alternative project	$1,300,000	$1,200,000	$800,000	
12. Limit on total allocation (lesser of 10 or 11)	$1,300,000	$500,000	$100,000	
13. Minimum allocations (separable costs, 3, 5, 7)	$600,000	$400,000	0	$1,000,000
14. Remaining benefits (12 minus 13)	$700,000	$100,000	$100,000	$900,000
15. Proportion of remaining benefits (percent)	78	11	11	100
16. Share of joint costs (line 9 times line 15)	$624,000	$88,000	$88,000	$800,000
17. Total cost allocation [1] (line 13 plus line 16)	$1,224,000	$488,000	$88,000	$1,800,000

[1] Average annual costs include amortization, interest, operation, maintenance and replacement charges.

Benefit-Cost Ratio

The benefit-cost ratio is a device for measuring in mathematical terms the economic worth of a project. We by no means claim that it is a precise method of evaluating a project, since it is only as reliable as the figures going into its two components—the benefits and the costs. Further, the benefit-cost ratio is not the sole criterion in justifying a project. Loss of life is never included in our cost analyses, but it is adequately treated by discussion. Likewise, there are many intangible benefits, such as the promotion of health, increases in

recreational opportunities and fish and wildlife values, that are thoroughly considered but generally no attempt is made to give them a mometary evaluation. However, the benefit-cost ratio is the best method we know of to indicate in simple terms the relative economic justification of a project. Professor Wantrup of the University of California, an outstanding economist and a recognized authority in the field of natural resource development, stated in an article in the November edition of the Journal of Farm Economics that the benefit-cost analyses provides the only objective basis for guiding political decisions.

Benefits are computed without regard to who receives them and without consideration of the question of repayment for services. The questions of reimbursement and local cooperation are independent of the problem of economic justification of projects. The computation of benefits is inherently inexact because it involves consideration of future events and the projection of past experiences. It is accomplished by estimating conditions with and without the project, and taking the difference between the two as the measure of the benefits attributable to the project.

In the case of flood-control projects, there are two general types of benefits: (1) those attributable to prevention of flood damage, and (2) those attributable to land enhancement, that is, higher type of utilization of the property made possible through the alleviation of the flood hazard.

Benefits accruing from the prevention of flood damages are divided into two categories: (1) primary or direct, (2) secondary or indirect.

Primary benefits are based on savings attributable to the prevention of direct damages inflicted by water on real and personal property, and reduction or elimination of costs of flood fighting measures, evacuation and reoccupation. They also include credit for prevention of certain indirect losses, that is, losses not directly affected by inundation, which are fully as real as water damage. Examples are loss of wages and business and increased costs of travel of rerouted traffic. Primary benefits are used in our economic analyses.

Secondary benefits from a project are those economic effects beyond the immediate zone of influence of the project, such as the benefit to an automobile agency that can sell more cars in the area because wages are not lost due to periodic stoppage of work in a factory which is shut down by severe floods. Secondary benefits are not included in our economic analyses because of their speculative nature.

Crop losses, which fall into the direct damage category, are appraised in terms of market value of the expected crop, less any costs that have not been incurred at the time of loss, such as cultivating, harvesting, and marketing costs. When replanting is possible it is taken into consideration in estimating the net crop loss.

To determine flood-control benefits we must estimate the amount of damages that would be prevented throughout the assumed economic life of the project, but with a maximum life of 50 years. This information, which must be obtained by an examination of maps or aerial photographs and an appraisal made on the ground, is plotted as a stage-damage curve, which shows the damage that would occur at every stage of the river.

The second phase of the problem is to estimate the frequency of each stage. This is extremely difficult for the stages which are reached infrequently. If we had reliable records going back 2,000 years we probably would be justified in saying that a certain flood would occur on an average once in 100 years, or possibly a larger flood would occur once in 500 years, but our records are extremely short. If the infrequent floods produce very large damages, as they generally do, the average annual damages are affected greatly by the assumption made as to their frequency. For instance, had the Thomaston Dam in Connecticut been built prior to the August 1955 flood, it is estimate it would have saved $77 million of damage in this rare flood. But how rare was that flood? If it occurs once in 500 years, the average annual damages preventable from it are $154,000; if it should reoccur with a 100-year frequency, its average annual damages preventable will be 5 times as much, or $770,000. The difference is $616,000. Yet prior to the 1955 flood we assumed total annual damages preventable by this dam to be $750,000. So you can see that the benefit-cost ratio can be almost doubled in this example by assuming the 1955 flood would occur once in 100 years instead of once in 500 years.

To estimate what would be the flow and stage for the rare type of flood that causes so much damage, such as the New England floods in 1955, on streams

where we have not experienced such floods, we must take the severest storm that has occurred, perhaps in some other part of the country that has similar weather characteristics, and place its rainfall pattern over the basin being studied. With this as a start, considering both the amount of rainfall and time elements, we derive a hypothetical rare flood. The frequency will not be great, obviously, but the effect might be great, as it was in the example I gave in New England. The stage and frequency of this flood are used, along with experienced floods, in plotting the stage-frequency curve.

The next step is to produce, from the other two curves I have mentioned, a frequency-damage curve, from which the average annual damage and the average annual damage preventable is quickly obtained. In addition to the flood-control benefits, other benefits produced by a flood-control project, if any, are evaluated. These include benefits to navigation, irrigation, power, recreation, fish and wildlife, water supply, pollution abatement and others.

I have gone into some detail to show you how flood-control benefits are computed. In the case of navigation projects, benefits taken include damages prevented due to groundings, increased loadings, and savings in ship time. General benefits are also claimed where commodities can be moved by water at less cost than alternative means of transportation. In the case of other types of projects the methods are equally thorough but necessarily different.

In addition to the general types of benefits discussed above, another general type is attributable to the increased or higher utilization of property made possible through alleviation of the flood hazard, improvement of drainage conditions, creation of usable land by spoil disposal, etc. These increased utilization or enhancement benefits are measured in terms of increased net earnings for the improved conditions, or by the improved market value of the land resulting from the project. While such benefits are considered in project formulation and justification, they are considered of especial local value and are the basis for increased local cooperation.

The sum of the general benefits and land enhancement constitutes the benefit side of the benefit-cost ratio.

The other element in the ratio is the cost of the project, converted, like the benefits, to an average annual amount. It includes amortization over the economic life of the project but not to exceed a 50-year period, interest, operation, maintenance and replacements, and an allowance for contingencies of 15 or 20 percent, depending upon the size and nature of the project. It includes local costs, whether cash contributions, real estate, or any other participation in the project itself, but not in self-liquidating facilities or developments which are not an essential and integral part of the project. For instance, in a navigation project the costs borne by local interests in building docks and in transit warehouses required to make the project usable are included, but not storage warehouses, railroad sidings, offsite access roads, and so on. The accuracy of costs improves as design progresses, bids are awarded, and the construction proceds. Contingencies, in decreasing percentages, are included to cover inaccuracies and unanticipated difficulties. However, it is not until the project is completed that the true cost is known.

Losses in agricultural production which will result from provision of flood-control works, such as the inundation of lands in a reservoir area, are accounted for in the price paid for lands required for the project. There are acquired by the Corps of Engineers at their fair market value after negotiation with owners. It is considered that such a value generally reflects the long term productive capacity of the land that is lost to agricultural use.

Both benefits and costs, and consequently the benefit-cost ratio, are computed in the survey report which is the basis for congressional authorization of a project, and again, if much time elapses, at the time of the committee hearings on the project which result in authorizing legislation. They are brought up to date when advance engineering and design funds are requested, and thereafter when necessitated because of changes in estimates or conditions.

Experience has shown that on the program as a whole the Chief of Engineers has been extremely conservative in estimating his benefits and in computing his benefit-cost ratios. In recent years his costs, also, have been on the conservative side as general price levels have become more stable.

From this discussion the committee will see that benefit-cost ratios are only approximate, but they are the best measure available as to the worth of a project. They are the result of a thorough economic analysis, which is not concerned with questions as to whether reimbursement is to be made to the Government.

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who is to make this repayment, or even who gets the benefits. These problems are important, but independent of a determination of a benefit-cost ratio.

Now let me give you an example of a simple determination of a benefit-cost ratio.

BENEFIT-COST RATIO

(Hypothetical Local Protection Flood-Control Project)

Average annual damages.—Average annual damages without the improvement are $46,000, consisting of $20,000 to residential areas, $19,000 to industrial areas, and $7,000 to agricultural areas.

Annual benefits.—Damage prevented is $38,000, consisting of $17,000 to residential areas, $15,000 to industrial areas and $6,000 to agricultural areas. Residual or nonpreventable average annual damages of $8,000 still exist due to being outside the protected area or because of the possibility of overtopping of the levees in those floods which exceed the project design. There are no land enhancement benefits.

First costs:	
Federal first cost:	
Channel enlargement	$50,000
Levees	611,000
Pumping plants	74,000
Total, Federal first cost	735,000
Non-Federal first cost:	
Lands and rights-of-way	46,000
Relocations	64,000
Total, non-Federal first cost	110,000
Total, Federal and non-Federal first cost	845,000
Annual charges:	
Federal annual charges:	
Interest, $735,000, at 2.5 percent	18,375
Amortization (50 years), $735,000, at 1.03 percent	7,570
Total, Federal annual charges	25,945
Non-Federal annual charges:	
Interest, $110,000, at 2.5 percent	2,750
Amortization (50 years), $110,000, at 1.03 percent	1,130
Maintenance and operation [1]	3,000
Total, non-Federal annual charges	6,880
Total, Federal and non-Federal annual charges	32,825

[1] Maintenance and operation is normally a responsibility of local interests in a local protection project.

Comparison of benefits and costs: B/C ratio equals $38,000 divided by $32,825, equals 1.16.

COST SHARING IN WATER RESOURCES PROJECTS OF THE CORPS OF ENGINEERS

The costs of water resources projects under the jurisdiction of the Chief of Engineers are shared between Federal and non-Federal interest in accordance with (1) the provisions of general river and harbor and flood control laws; (2) the specific requirements of acts authorizing the projects in some cases; (3) administrative instructions issued by the Bureau of the Budget where rules for sharing of cost in particular functions are not specified by law.

The extent to which project costs for the various functions of these projects are shared between Federal and non-Federal interests is as follows:

Navigation.—The costs of navigation projects are borne almost entirely by the Federal Government. As a general rule, local interests are required only

to provide terminal facilities, rights-of-way, dredge spoil disposal areas, and alterations of highway bridges and utilities, such as pipelines and sewage outlets which may be affected by the projects. Navigation improvements are maintained and operated by the Federal Government. The River and Harbor Act of 1920 in section 2 provides for determining special and general benefits of navigation projects and for recommendations as to local cooperation to be required on the basis of special benefits.

Recreational navigation.—Under an administrative formula developed by the Chief of Engineers, the costs of small navigation projects primarily for recreational use are divided between the Federal Government and the local interests concerned. In practice application of this formula requires that local interests pay a large part, and in some cases the major part, of the first cost of such projects. The cost of maintenance and operation is considered in computing the local share in the first cost of projects of this kind, but the actual maintenance and operation is by the Federal Government.

Local flood protection.—The general Flood Control Acts, beginning with that of 1936, provide as a minimum requirement of local cooperation that non-Federal interests shall provide lands, easements, and rights-of-way; hold and save the United States from damages due to the projects; and agree to maintain and operate the works upon completion. In addition, administrative instructions issued by the Bureau of the Budget (BOB Circular A–47 dated December 31, 1952) require that where land enhancement constitutes a benefit of a project, local interests shall pay 50 percent of the first cost proportionate to that benefit.

Major drainage.—The Flood Control Act of 1944 (sec. 2) defined flood control to include major drainage outlets and channels. The cost of major drainage elements of flood-control projects is divided between Federal and local interests in a manner similar to the requirements described above for local flood-protection projects.

Flood-control reservoirs.—In accordance with the provision of the Flood Control Act of 1938 and subsequent acts, reservoirs purely for flood control are constructed and operated entirely at Federal cost. This provision is based on the fact that reservoirs for flood control generally affect long reaches of river, where the effect often crosses State lines, and where beneficiaries are not readily identifiable. In interpreting this law, however, the Chief of Engineers has required local cooperation, similar generally to that for local flood-protection projects, where reservoirs are provided in lieu of the normal type of local flood-protection works, such as levees and channel improvements. In addition when flood-control reservoirs provide land enhancement benefits, local interests are required to pay 50 percent of the cost proportionate to that benefit.

Hydroelectric power.—In multiple-purpose projects which provide for the development of hydroelectric power, the part of the cost of the project allocated to power is fully repaid to the Federal Treasury by revenues collected by marketing agencies. The Chief of Engineers is responsible for determining the part of the costs of a project which should be allocated to hydroelectric power. Rates for sale of such power to recover the costs are established by the marketing agency of the Department of the Interior and approved by the Federal Power Commission.

Water supply.—Where storage for municipal and industrial water supply is made available by multiple-purpose projects, water users are required to pay the cost allocated to such storage. The Appropriations Act for Fiscal Year 1938 authorizes the addition of water supply storage, providing that water users pay for the extra or incremental cost of adding it. Under the River and Harbor Act of 1944, the Secretary of the Army is authorized to dispose of "surplus" water for domestic and industrial uses at such prices and terms as he may deem reasonable.

Irrigation.—When reservoirs under the Chief of Engineers provide storage specifically for irrigation of agricultural lands the part of the cost allocated to irrigation storage is required to be repaid by water users. Under present practice such repayments in the 17 Western States are generally handled by the Bureau of Reclamation under the provisions of reclamation law. In the past some projects have been authorized by the Congress with the requirement that repayment arrangements be made by the Secretary of the Army.

Pollution abatement.—Where pollution abatement is a project function and project costs are allocated to it, such costs are borne fully by local interests. This is in accordance with administrative instructions contained in BOB Circular A–47. Assignment of such costs to local interests is based on the fact that the effect and benefit of reservoirs in pollution abatement is to eliminate or

reduce the need for treatment by municipalities and industries of sewage and other waste discharged into rivers.

Preservation of fish and wildlife.—Where projects have as a function the preservation or enhancement of fish and wildlife resources, present administrative instructions (BOB Circular A–47) required that the cost of this function be borne by local interests unless the improvement to fish and wildlife is of national significance and part of a Federal fish and wildlife program. In the latter case, it would be borne by the Federal Government.

Recreation.—When project costs are allocated to recreation and the recreational benefit is essentially local in character, the cost allocated to this function is borne by local interests. If the recreational function provided is of national significance, such as a facility in connection with a national park or forest, the costs would be borne by the Federal Government.

Land enhancement.—In all cases where projects produce land-enhancement benefits and these can be measured and utilized in the economic justification of the improvements, regardless of the type of project, Non-Federal interests are required to bear 50 percent of the part of the first cost proportionate to the land-enhancement benefit.

Summary.—It will be seen, therefore, that under existing law and administrative instructions, the sharing of costs between Federal and non-Federal interests varies according to the functions of a project, to reflect essentially the present Federal interest in that particularly function. Thus the share of cost to be borne by local interests in any specific function will be the same regardless of the type of project or where it is located. The degree of local participation in any particular project as a whole, however, will vary with the functions which are incorporated in that project and with the benefits that it produces.

Mr. DAVIS. General, that has been a perfectly splendid statement you made. It is so important that I am going to ask our reporter to prepare for us a copy for each member of the committee, because we cannot wait for 5 or 6 days. You have laid the predicate so splendidly that I think the committee will share my belief that we ought to have a copy of it at the earliest possible moment. If at that point any of the members on either side want to ask questions, they may do so, but I have in mind your statement of damages and what could have been saved in damage if we had gone along on an uninterrupted basis, and so on, and if we had planned well and appropriated well.

Then, of course, there is a background there of the proved worth. Of course, the Corps of Engineers' integrity is well known and you have been doing fine work on civil functions. However, if there are any questions from either side at this time on what you have just stated preliminarily I will invite the members to ask questions in order. Governor Dempsey.

Mr. DEMPSEY. I am disappointed that he did not bring more copies of that statement up here. I am anxious to get one.

Mr. DAVIS. The reporter will get them for us.

General ITSCHNER. I have only one copy here, which is badly scratched up.

Mr. DAVIS. It is to important for us to delay having a chance to read it with great care, because it is full of real information.

Mr. Smith.

Mr. SMITH. No questions.

Mr. DAVIS. Mr. Wright.

Mr. WRIGHT. General Itschner, I was interested in your report on the percentage of completions on these various watersheds ranging, I think, from 22 or 23 percent and in one instance up to 38 or 39 percent.

General ITSCHNER. Actually up to 66 percent in one instance only; from 22 to 66 percent.

Mr. WRIGHT. I am wondering if you have any comparative figures on the completion of the Trinity in Texas, or do you have those figures available to you?

General ITSCHNER. I do not have that information available to me, sir, but I would be glad to obtain it and insert it in the record, if you would like it.

Mr. WRIGHT. I would appreciate it if you would. There is just this thought: That from all of the information I have been able to gather the project completion of flood control on the main stem of the Trinity River in Texas seems to have lagged considerably behind the development of the other similar watersheds, coupled with the fact that my information indicates that on that Trinity River in Texas local participation has been greater than it has in any other watershed of a similar character in the entire Nation. My figures indicate there are some $144 million invested in the 9 major reservoirs, serving the purpose of main stem flood control above Fort Worth and Dallas, and substantially more than half of that figure is local contribution. When we take separately the reservoirs above Fort Worth, 72 percent of the reservoir capacity was provided by local contributions. I am wondering if that is not something of a record and if perhaps it should not merit a bit more attention on the part of the planning for the completion of the development for flood-control purposes only.

General ITSCHNER. Certainly the contribution by local interests in the reservoirs in the Trinity River Basin has been very great. It is due to the fact that incorporated in the flood-control reserviors in that basin is a large amount of water supply storage, for which we expect the local interests to pay the entire amount allocated to that purpose.

Mr. WRIGHT. I thank the general for his statements.

(The information requested is as follows:)

The Corps of Engineers authorized flood-control program on the upper Trinity River Basin consists of 4 reservoirs and channel improvements at a total estimated cost of $62,276,000 of which $58,228,000, or 93 percent, has been appropriated to date.

Mr. DAVIS. Mr. Mack.

Mr. MACK. General, as usual, your statement was filled with most helpful information. I am looking forward to having a copy of it, as has been promised by the chairman, so I can study it at greater leisure and in closer detail.

During your statement, General, you mentioned that funds for carrying out surveys were all inadequate, and that even under the favorable appropriations of the last Congress and the budget request of this year it will take 6 to 7 years to make all the surveys which the committee has authorized. The appropriation last year, as I remember it, was about $2 million, and the budget request about the same amount this year.

General ITSCHNER. That is correct, sir.

Mr. MACK. In round figures, $2 million. Do you think it would be quite helpful toward speeding up this survey program if that appropriation should be increased from $2 million to $2,500,000?

General ITSCHNER. It would be very helpful, sir, if the appropriation were increased for surveys.

Mr. MACK. Then the Army engineers could complete a great number of these surveys that are backlogged and held up at the present time?

General ITSCHNER. Yes, sir. What we are especially anxious to do is to complete surveys that have been started and have had considerable funds spent on them in the past years, so that we will have some results from the surveys upon which the Federal Government has spent money.

Mr. MACK. I asked those questions, Mr. Chairman, for this reason: Recently I wrote a letter to the chairman of the Committee on Appropriations, and also sent a copy of that letter to all of the members of the Appropriations Committee, urging that they increase the appropriations for surveys from $2 million, which is the amount recommended by the Bureau of the Budget, to $2,500,000. I have received very favorable letters from Mr. Cannon and other members of the Appropriations Committee. If the other members of the committee think it is advisable I urge it will be very helpful if this committee by resolution will ask the Appropriations Committee to increase the appropriation for survey funds from $2 million to $2½ mililon.

Mr. DEMPSEY. I would question the $2½ million, but if he can use more I would go as high as he feels he can use advantageously.

Mr. MACK. I would, too.

Mr. DEMPSEY. I do not think $500,000 is a sufficient increase for the surveys. These cuts are made all the time; the work is put off year after year, and is not completed.

Mr. MACK. I think it is wise action by this committee, because this committee asked that these surveys be made. These surveys are being held up by the inadequate appropriations.

Mr. DEMPSEY. Will you yield for a question?

Mr. MACK. Yes.

Mr. DEMPSEY. What amount of money could you use, if appropriated, for surveys this year?

General ITSCHNER. Congressman Dempsey, I would like to point out that the $2 million mentioned by Congressman Mack—accurately, $2,050,000—is the amount that is in the President's budget for flood-control studies alone. I believe we could very profitably use about $2,250,000 for that type of study.

Mr. DEMPSEY. For every type——

General ITSCHNER. For flood-control studies.

Mr. DEMPSEY. Just for flood control?

General ITSCHNER. Yes, sir. The overall amount we have for studies of one type or another, including seven special studies that are rather extensive ones, including the Great Lakes harbors survey, and the San Francisco Bay survey, and the Ohio Basin survey, and the Columbia River review, and the Watershed Protection Act studies, and the hurricane studies, and the Delaware River comprehensive survey, totals $4,660,000 in the President's budget.

Mr. DEMPSEY. What could you use?

General ITSCHNER. We could use $5,250,000.

Mr. DEMPSEY. You will have the engineers to use it?

General ITSCHNER. That is the limitation on what we could do. The $5,250,000 mentioned is within our capability.

Mr. DEMPSEY. You did not have sufficient funds to retain them to do this survey work?

General ITSCHNER. We lost some of the capable people during the years when our appropriations were inadequate for this job.

Mr. DEMPSEY. I think you should request the amount you could use rather than cut it down, because it is very important. This is the most important part of the work. We are letting engineers get away and they are very difficult to get at this time, because of a shortage that exists. I do not think we are getting anywhere by not giving you all the money for surveys that you could use.

General ITSCHNER. Engineers are extremely difficult to get now, particularly those qualified to work on surveys.

Mr. MACK. General, last year the appropriation for surveys was about $2 million. This year the requested appropriation is in like amount of about $2 million. However, due to the energy of my friend, Mr. Scudder of California, $400,000 of this year's money is earmarked for California, so that the remaining fund is $400,000 short of what was previously available. That is another reason why Congress should increase materially the amount of money for these surveys.

I noticed, General, in your statement about the amount of flood-control work completed, that you did not mention the Columbia Valley region. You mentioned the Sacramento Valley and the Mississippi, but you did not mention the Columbia.

General ITSCHNER. The Columbia River Basin is approximately 28 percent complete.

Mr. MACK. That is as to the dams upstream and the protection works downstream—both?

General ITSCHNER. Yes, sir. That is the entire authorized program there. Of course, what is needed may be much greater than the authorized program in any basin.

Mr. MACK. The engineers have made very fine progress there so far this year in providing protective works against anticipated floods. At lease that is my understanding.

General ITSCHNER. Yes, sir. We have allocated pretty close to $1 million to the three districts in that division for construction of emergency flood-control works in anticipation of a flood.

Mr. MACK. This is advance protection for work on the dikes where they anticipated very heavy floods this year due to the heavy snow in the mountains—and they anticipate flooding on the lower Columbia. This has nothing to do with survey money.

Mr. DAVIS. Mr. Scudder.

Mr. SCUDDER. General, I would like to say I enjoyed your presentation here today and I feel that this committee has one of the most important functions of any committee in the Congress, that is, developing America and improving its resources which benefit the entire country and protect it against floods, and so forth. I have always been very much interested in an effort to have the Army engineers work at full capacity in their surveys. I have discussed with you and others many times that we should increase the survey money to the full maximum capacity of the engineers to function on a 100 percent program. I believe it is pennywise and pound foolish to authorize projects and then not have the engineers working toward a solution of the problem, where the committee finds that a problem does exist. I have discussed on several occasions that we should have about $6

million, which would be about $750,000 more than the amount you advise could be used in this program.

There is a possibility, I might say to Mr. Dempsey, that if there were engineers available we could step up a great number of these programs. I believe it would be good public-relations work for our people, the American people—our taxpayers—if we were showing some inclination to assist them in their problems rather than building up tremendous expenditures for other peoples throughout the world It is not very conducive to good feeling. I find that in my own district people say, "Why are we not doing something to improve our local conditions rather than building large installations in foreign countries?" I am not going to dispute the value they have or their possible international political value of these projects throughout the world, but I do not like to see our own economy suffer from lack of the proper precautionary measures to prevent these floods that affect the economy of our country.

I think it has been shown in most all instances where flood conditions have occurred, that had there been a construction of justifiable projects, as you said this morning on one project the losses that were permitted to occur amounted to more than the entire cost of the construction of the proposed project and would have prevented the flood damage. If our committee can influence the Appropriation Committee to grant a larger sum of money for survey work, I most certainly desire to back it up to the full extent of my ability in order on make the money available.

In fact, I have talked with representatives from the White House to try and convince them that funds should be provided so that the engineers proceed to the fullest extent.

Mr. SMITH. Will the gentleman yield?

Mr. SCUDDER. Thank you very much.

Mr. SMITH. Will the gentleman yield?

Mr. SCUDDER. I yield to the gentleman from Mississippi.

Mr. SMITH. I wanted to point out that the White House sent the budget here. If the White House will ask for a supplemental increase——

Mr. SCUDDER. That is what I say. I have even gone that far and I think they should ask for a supplemental increase in the survey money.

Mr. SMITH. Our problem is to get Congress to agree to override what the White House recommended.

Mr. SCUDDER. We want to incerase it there.

Mr. SMITH. Oh, yes; but it is not a question of that.

Mr. SCUDDER. I did not mean to inject politics into this.

Mr. SMITH. No; it is not politics, but it is the same situation as always.

Mr. SCUDDER. I hope we can put on sufficient pressure in every locality and every area of the various States so that we can get proper planning money.

Mr. THOMPSON. Mr. Chairman.

Mr. DAVIS. Mr. Thompson.

Mr. THOMPSON. Mr. Chairman, I apologize to the subcommittee and the general for not having been here on time to hear his statement, but I am looking forward to reading it. I just got back from Louisiana and could not get here earlier. I wanted to compliment

Mr. Scudder on that statement. He said things that needed to be said. I think the sooner we evaluate the conditions that exist, the sooner the Congress will be able to satisfy itself it is pursuing a course in the order of importance on these projects, and getting the information which is needed to spend more money of the Treasury on the development of our own economy. I think your statement was very timely and extremely well stated.

That is all I have, Mr. Chairman.

Mr. DAVIS. I can say to those of you who were unavoidably detained that the Chair already asked the reporter to get for us a copy of General Itschener's preliminary statement, because it was so thorough and so complete that we want to have an opportunity to read it and study it with great care, and we do not want to wait for these hearings to develop too many days before we can do that.

Now on this side.

Mr. BECKER. I offer my apologies to you and General Itschner and I will read his statement.

Mr. BUSH. I want to be in accord with an associate myself with what Mr. Becker says. I am sorry, but I had one of my boys who is going to graduate from Annapolis in June. He was over there to visit with me and I could not get away. He is really a happy boy.

Mr. DAVIS. We are going to take care of this matter by getting the reporter to give us a quick copy of the General's preliminary statement. I repeat, it was a perfectly excellent preliminary statement and one of the most revealing I have ever heard since I have been a member of this committee, which has been a long time.

Mr. Baldwin.

Mr. BALDWIN. Mr. Chairman, I would like to add I have been very much impressed with the statement made by General Itschner and feel the Corps of Engineers are certainly in very competent hands. I would certainly support any motion this committee may see fit to make—a formal motion—to transmit our views to the Appropriations Committee that we feel that the full amount that the Corps of Engineers could properly utilize should be appropriated for survey work.

Mr. DAVIS. If I may make a suggestion along that line, when we do get this statement for study I would like to have Governor Dempsey and Mr. Smith and Mr. Mack go over it and prepare out of the wealth of information that you have given us the proper resolution which should be passed by this committee. If you gentlemen will do that then I think we can be more effective, because we will then have the basis, that is, the factual basis, on which to present a more appropriate resolution.

Mr. MACK. That is correct, Mr. Chairman. Time is of the essence, though, because this Appropriations Committee is now on the verge of acting on the bill. So perhaps Mr. Dempsey and Mr. Smith and I could get together tomorrow and have a resolution ready for the committee.

Mr. DAVIS. Oh, yes. Now on this side are there any questions to my left?

Mr. SCHWENGEL. I have two brief questions. I want to join with the rest of my colleagues in saying I appreciate the fine statement you have given, and I will be looking forward to studying it in detail.

In your statement in reference to flood control you said our flood-

control projects have paid $3 for every $1 invested. Now in that connection, which I think ought to appear in the record, as you look to the future do you anticipate the uncompleted projects will benefit in that same ratio?

General ITSCHNER. I should think that they probably will, or very close to that ratio. Furthermore, I would like to point out that all of our projects are based on a 50-year life. So after the 50 years are over, most of them will be in 100 percent operation for many, many decades to come, and after that time the ratio becomes infinite.

Mr. SCHWENGEL. It becomes even greater.

General ITSCHNER. Yes, sir.

Mr. SCHWENGEL. One other question. I am quite interested in soil conservation in our area. I just ask this question for further enlightenment on my part, and maybe on the part of some members of the committee. The question is, is there a cooperation between the Corps of Engineers group and those interested in soil conservation and water conservation, and generally conserving water at the source? In other words, is there a proper relationship between the conservation people in other areas with your objectives?

General ITSCHNER. We, of course, heartily subscribe to the purpose of watershed treatment. We do cooperate with the Soil Conservation Service of the Federal Government and the various State and local agencies and the soil conservation districts. We have an item in the fiscal year 1957 budget of $50,000 for a special study called Watershed Protection Act studies, which will enable us to continue this cooperation with the soil conservation districts and the Soil Conservation Service. I have personally attended every one of the meetings that have been held by the National Association of Soil Conservation Districts in the past 2 years, with the exception of 1, and I did not get to that because of a congressional hearing. We are trying to work more closely with them, both at our level and through the Assistant Secretaries, and we hope to achieve more than we have in the past.

Mr. SCHWENGEL. Thank you.

Mr. THOMPSON. Mr. Chairman, may I ask a question?

Mr. DAVIS. Yes, Mr. Thompson.

Mr. THOMPSON. General Itschner, perhaps you covered it in your report, but we in Louisiana and in many of the coastal States especially have been plagued by this beautiful flower which is the water hyacinth. Was that covered in your report this morning?

General ITSCHNER. No, sir. I did not cover any specific survey report, and that is one.

Mr. THOMPSON. It is a project of such broad scope and such importance that Congressman Willis and I introduced legislation on this project with the hope that we could get something started this year on it. I think the problem is recognized and there have been reports given by several Departments to the Budget, and if you have any information as to the status of the proposition, it might be interesting to get that report from you.

General ITSCHNER. That report, sir, is in our list of reports which are in the process of coming to the committee. It has not yet been furnished to the committee. We certainly hope to get it to the committee before the hearings are over so that it may be heard this year. We call it the Water Hyacinth-Louisiana report, although it is applicable also to water hyacinth eradication elsewhere.

Mr. THOMPSON. I might state to the committee that this water-hyacinth problem is such that if salt water would not kill the hyacinth it would go over to Europe. That is how fast they spread. They stop navigation and they destroy wildlife and fish, and as one trapper said to me, "I do not know what we are going to do. We had no muskrats last year and if something is not done next year, we will have 50 percent less."

Mr. DAVIS. Are there any other questions?

Mr. SMITH. I have one question. I would like to tell the committee and the general that there was printed in last week's issue of the United States News and World Report a very enlightening interview with General Sturgis dealing with various water problems. I think it would be of value to all the members of the subcommittee to read that. I think it brings out some problems that we should consider beyond what was mentioned in the statement that General Itschner read, as to our authorization legislation, and how it would be affected by individual projects, and how it would affect things in the overall.

Mr. DAVIS. Thank you.

Now do not get too far away this morning, General.

General ITSCHNER. I will stay here all the time.

Mr. DAVIS. We do not expect you to be here every day, of course. We will proceed a little bit out of order to take up the Lake Chautauqua and Chadakoin River project in New York, Senate Document 103.

LAKE CHAUTAUQUA AND CHADAKOIN RIVER, N. Y.

Mr. DAVIS. Mr. Reed.

Mr. REED. Yes, Mr. Chairman.

Mr. DAVIS. Would you prefer to have the engineers make the statement first about this project, or would you prefer to make the statement yourself and then introduce these witnesses? We have some for the project and some against the project.

Mr. REED. I would like to meet with your convenience and that of the committee.

Mr. DAVIS. Well, it is usual for us to have a statement from the engineers first.

Mr. REED. That is perfectly agreeable, sir.

Mr. DAVIS. Fine. Then if you will come around closer, since you are one of the senior Members of the House, we would like to have you close to us. I believe Mr. Harry Adams will represent the Corps of Engineers on this particular project.

General ITSCHNER. That is correct, and Mr. Adams is here to testify, sir.

Mr. DAVIS. Will you come around, Mr. Adams?

STATEMENT OF HARRY W. ADAMS, CORPS OF ENGINEERS

Mr. ADAMS. Mr. Chairman, this is a flood-control project for the protection of Lake Chautauqua and the town of Jamestown. Lake Chautauqua as shown by the vicinity map is located in the southwestern corner of New York. It lies between the drainage of the Ohio River and Lake Erie. The project involves the protection of the area around the lake and in the vicinity of Jamestown from flood

damages by diversion of floodwaters through Jamestown and through Lake Erie.

The drainage area that is tributary to Lake Chautauqua is 188 square miles and the lake itself has a surface area of 21 square miles. The shoreline of Lake Chautauqua is about 40 miles. The entire lake area is well developed for recreational purposes, with summer cottages, which are susceptible to damage during the high lake stages.

The natural outlet of the lake is through the Chadakoin River, which flows to the Allegheny and down to the Ohio River at Pittsburgh. The Chadakoin River in its course through Jamestown flows through a well-developed industrial area, which is subject to flood damages by high river discharges.

On the north end of Lake Chautauqua it is only a short distance to Lake Erie and the high point of the divide between Lake Chautauqua and Lake Erie is about elevation 1,366. Normally the Lake level is maintained at elevation 1,308. The discharges from Lake Chautauqua are located by or regulated by Warner Dam, which is located at Jamestown, and yet controls the water levels in the lake within desirable limits. Warner Dam is operated by the Warner Dam Association and was originally constructed by the State of New York. The stream slopes of the Chadakoin River range about 7.6 feet per mile, whereas in Little Chautauqua Creek in the drainage going to Lake Erie the slopes are quite steep, ranging up to 200 feet per mile.

Jamestown is the largest town in the area, having a population in 1950 of 43,354. The next largest town is Lakewood with a population of 3,013.

The area around Lake Chautauqua is well developed and there are 2,600 cottages and homes for summer residential purposes.

The State of New York operates a fish hatchery at Bemus Point. The city of Jamestown is well developed industrially and is an important manufacturing center for wood, steel, furniture, veneers, building materials, hardware, and so forth.

The precipitation over the area tributary to Lake Chautauqua varies from about 40 to 44 inches a year, and averages about 42 inches. The rainfall during the year varies from 4 inches in July to about 2.8 inches in February. The average annual snowfall amounts to 94 inches.

The late spring season is the predominant flood season, generally occurring from rainfall and snowmelt. Floods have occurred around Lake Chautauqua and along the Chadakoin River on numerous occasions. Going back to 1912, which is a period of 44 years, there have been 87 flood occurrences.

Flood stage on Lake Chautauqua is taken at elevation 1,309, which is 1 foot above the desired operating level and is a stage at which damages begin.

The maximum flood of record occurred in March 1913. It reached an elevation of 1,312.7, which is 3.7 feet above flood stage on Lake Chautauqua. The flows from Lake Chautauqua through the Chadakoin River were 2,400 cubic feet per second. The flood stage on the Chadakoin River is about 1,000 cubic feet per second.

There is an existing authorized project for improvement of the Chadakoin River down to Warner Dam, which was authorized by the Flood Control Act of 1944. It is a channel improvement of the

Chadakoin River from boat landing bridge, which is at this point, down to Warner Dam, and would be supplemented by a seasonal regulation of the elevation of Lake Chautauqua by operation of Warner Dam and in accordance with a predetermined schedule. No construction under the project has been done.

The area around Lake Chautauqua which is subject to damage amounts to 350 acres. The area along Chadakoin River which is subject to flood damages is 475 acres. During the March 1936 flood, which is the second largest flood, there were 1,037 residential and 21 commercial and industrial properties in the Lake Chautauqua area, and 99 residential and 72 commercial and industrial properties along the Chadakoin River. The direct flood damages that have been estimated for the March 1936 flood based on January 1950 prices are estimated to be $178,000 in the Lake Chautauqua area, and $111,000 along the Chadakoin River, totaling $289,000.

The average annual direct damages, also based on January 1950 prices are estimated to be $148,400 in the Lake Chautauqua area and $52,200 along the Chadakoin River, for a total of $200,600.

In the survey studies consideration was given to different methods of flood control. Channel enlargements were considered to increase the channel capacity on the Chadakoin River through Jamestown to accommodate larger outflows from Lake Chautauqua. Consideration was also given to storage reservoirs on tributaries of Lake Chautauqua. Consideration was given to diversion of flows from Lake Chautauqua by the Chadakoin River and by Lake Erie. These various methods were considered in connection with the lake regulation schedules to use available storage for the storage of flows in Lake Chautauqua.

Local interests requested that consideration be given to enlarging the scope of the authorized project. They desired the diversion of the excess waters from Lake Chautauqua to Lake Erie in preference to a channel enlargement through Jamestown. They also favor modification of the operation of Warner Dam to maintain the lake at a lower winter elevation and a higher summer elevation than is now done, in order to utilize the lake storage capacity.

The plan of improvement that is recommended——

Mr. DAVIS. Pardon me, Mr. Adams. This is going on much longer than the committee expected. I mean as far as detail is concerned. You say here:

The plan of recommended improvement provides for diversion of flood waters to Lake Erie via divide cut and Little Chautauqua and Chautauqua Creeks; enlargement of Chadakoin River between boat landing bridge and Warner Dam; and repair of Warner Dam. Project will reduce flood damages at Jamestown and permit maintenance of optimum lake levels.

That is about all we want in this committee. I am reading from the report of the Chief of Engineers dated June 23, 1955.

It has been very interesting to listen to all of that, but all this detail, General Itschner, is something that we cannot have on every project.

General ITSCHNER. No, sir. We will brief it a great deal for other presentations.

Mr. DAVIS. Because in other years, you will remember, we had an engineer officer who was skilled in briefing it and in summarizing it quickly. With Joe Brennan at his side we just wheeled and dealed. I do not want to be discourteous. Please do not misunderstand me.

Mr. ADAMS. It is all right, sir.

Mr. DAVIS. But all of us will agree that we cannot have this much detail on the subsequent projects. We never would finish. That is about all that we need from you at the moment, Mr. Adams.

Mr. Reed, we will be glad to hear from you because you have some people here who favor this and some who are not in favor of it. We do not have to go over all of this detail, you understand.

STATEMENT OF HON. DANIEL A. REED, MEMBER OF CONGRESS FROM THE STATE OF NEW YORK

Mr. REED. I realize that; I understand time means much to a splendid committee like this. You are all busy men and have other work to do: I shall be very brief.

I do want to say I appreciate the honor of coming before this splendid committee. It must be a great satisfaction to each member of this committee to feel that you are dealing with problems that affect the welfare of the people, both economically and from the humanitarian aspect. You have good reason to be mighty proud of the work you are doing.

I have witnesses here on both sides of this controversy. I have narrowed them down to one representative of each group in order to save your time. I will now introduce the first witness, Mr. Stanley Loomis of the Chautauqua County Flood Control Committee.

Mr. DAVIS. Mr. Stanley Loomis. Come around, Mr. Loomis. Your name is Mr. Stanley Loomis?

STATEMENT OF STANLEY LOOMIS, MEMBER OF THE BOARD OF SUPERVISORS OF CHAUTAUQUA COUNTY AND CHAIRMAN OF THE FLOOD CONTROL COMMITTEE

Mr. LOOMIS. That is right.

Mr. DAVIS. And your official connection?

Mr. LOOMIS. I am on the board of supervisors of Chautauqua County and chairman of the flood control committee.

Mr. DAVIS. And you are for this project?

Mr. LOOMIS. Yes, I am.

Mr. DAVIS. We would like to hear from you briefly.

Mr. LOOMIS. All right, sir.

As a duly elected member of the Chautauqua County Board of Supervisors and chairman of the Chautauqua County Flood Control Committee of the same group, and also representing the towns that border the complete circumference of Chautauqua Lake, I would like to say I am here in support of the proposed plan of the United States Army engineers for flood control on Chautauqua Lake.

An emergency resolution 855 in 1950 was passed by the Chautauqua County Board of Supervisors in favor of this proposal, and in March of 1956. After repeated requests of lake residents because of extreme high water and flood conditions beyond control, the Chautauqua County Flood Control Committee met and approved in general the Army plan and submitted a resolution to the Chautauqua County Board of Supervisors for a more recent or immediate action.

At the April meeting in 1956 of the Board of Supervisors the Emergency Resolution 5356 was passed with all in favor to approve

the basic principles set forth in the Army engineers' plan to control floodwaters in and around Chautauqua Lake.

I would like to say that I and the groups I represent are very glad, since this extensive study has been made by the Army, who we feel are most capable flood-control engineers, and also who have after this extensive survey come up with a plan that meets the several local needs involving the possible number of 2,000 properties on Chautauqua Lake, and probably curing 98 percent of the flood conditions which may occur in the future on the lake and in the immediate Jamestown area, and to the east, we would like to see the passage of this bill.

The Army plan would allow industrial expansion to the east of the city of Jamestown, where very few properties are at present safe from floodwater conditions, with the result that prospective plants will not erect their plants there. With the State of New York giving serious consideration to the extent of a quarter million dollars in weed control to clean it up, and the Federal Government interested in our soil-erosion control program, and also the State Park Commission ready to move to acquire property for construction of a new public State Park at Long Point on Chautauqua Lake, it would certainly seem advisable that we secure the help of the Army engineers with a plan which would make living along the lake and the Chadakoin River more feasible than under present conditions.

Also along the same lines I would like to say the Chautauqua County in the State of New York spent considerable time and money and expense on the services of engineers for the control of lake pollution and sewage disposal. If the level of the lake can be regulated as recommended by the Army engineers in the plan, the results of this extensive work and survey will be improved satisfactorily.

In closing I wish to add that being here I have the privilege of representing, except for a very few possibly selfish interests, the county of Chautauqua, within which Chautauqua Lake is situated.

I thank you for this opportunity of speaking in favor of this proposal.

Mr. DAVIS. All right, sir. Are there any questions from this side?

Mr. BECKER. I would like to ask a question of the gentleman, in connection with the details of the Army engineers. Do I get it straight that there are only about 1,000 people affected in that area by the floods? It seems to me from information I have had through the years, although I have not been up there, there is considerably more than that, but I thought the statement of the Corps of Engineers was 1,000.

Mr. LOOMIS. No; as I understood it, it was 2,600.

Mr. BECKER. No; I thought 1,000 individuals and ninety-odd commercial on the lake.

Mr. ADAMS. Around the lake area my information is there are 2,600 properties and summer cottages.

Mr. BECKER. What about Jamestown itself?

Mr. ADAMS. I do not know the exact number of population affected by flood in Jamestown.

Mr. BECKER. But it is a considerable number, is it not?

Mr. LOOMIS. Yes.

Mr. BECKER. That is what I thought. I had the impression from reading this statement that it seemed like a very insignificant number compared to what I know about Jamestown and the business in that area.

The other thing down here is the amount of damages which ran from $200,000 by different floods to a slightly higher figure. Is that correct, too?

Mr. ADAMS. Yes, sir; the damages for the 1936 flood were estimated at $289,000. The estimate of the average annual damages is $200,000.

Mr. BECKER. $200,000; and the total cost of the projects here would run around $5,700,000?

Mr. ADAMS. Yes, sir.

Mr. BECKER. That is all, Mr. Chairman.

Mr. DAVIS. I notice here the annual benefits really runs to about $330,000 and it costs $258,000 annually to maintain it. It is one of those borderline cases, as I see it, at this point.

Thank you for your explanation, and now we will hear the opposition witness, Major Reed.

Mr. REED. Yes, sir; Mr. Norman Johnson, president of the Jamestown City Council, is here.

Mr. DAVIS. Please state your name and official position to the reporter.

STATEMENT OF C. A. NORMAN JOHNSON, PRESIDENT OF THE CITY COUNCIL OF THE CITY OF JAMESTOWN, N. Y., ACCOMPANIED BY LEONARD A. BERGMAN, DIRECTOR OF THE DEPARTMENT OF PUBLIC WORKS; AND DANIEL A. ISAACSON, CORPORATION COUNSEL

Mr. JOHNSON. Mr. Chairman, my name is C. A. Norman Johnson, president of the City Council of the City of Jamestown, N. Y., and I am appearing before your honorable body in my capacity as acting mayor of the city, due to the absence of our mayor, Carl F. Sanford, who is presently in California on municipal business.

Accompanying me today are two other officials of the city of Jamestown, they being Leonard A. Bergman, director of the department of public works, and Daniel A. Isaacson, corporation counsel.

We appear before you today respectfully requesting that further consideration and approval of the flood control plan for Chautauqua Lake and the Chadakoin River, as proposed by the United States Army engineers, be withheld by your committee and the Congress of the United States until such time as the prior and continuing requests for essential modification and clarification of the existing plans have been met.

The city of Jamestown, through its council, has formally gone on record by virtue of resolutions adopted on the 23d day of February 1954, and on the 7th day of June 1954, as being opposed to the United States Army engineer flood-control plan for Chautauqua Lake and the Chadokoin River, as presented without further modification, certified copies of which resolutions are attached hereto and made a part hereof. The objections to the existing plan were based essentially on (1) the failure to recognize and adequately provide for the improvement and maintenance of the entire Chadakoin River, which

is the natural outlet of Chautauqua Lake; and (2) the failure to provide the city of Jamestown and other communities to be affected with sufficient details as to the exact nature of the project, the cost, how such cost is to be borne, and the resultant rights and duties, all of which information is necessary in order to formulate a sound and intelligent opinion.

Since those expressions were recorded and forwarded to the proper Federal officials, no efforts have been made by the United States Army engineers ot modify their plans nor to supply the necessary information as requested.

The present plan does not begin to adequately take into consideration the fundamental fact of the importance to Chautauqua Lake and to the city of Jamestown, of the Chadakoin River in its entirety and of the Warner Dam, which is an essential part of it. This river is the natural outlet for Chatauqua Lake and should be continued as such. The city of Jamestown grew up and received its vitality from this river with the result that its healthy continuation is essential to local industrial uses, not the least of which is our municipal powerplant. As such, it has been determined after considerable study by local groups that a channel capacity of between 1,000 and 1,500 cubic-feet-seconds must be maintained in order to provide for local industry and for flood control, which channel can be provided through the dredging and cleaning of the Chadakoin River above and below the Warner Dam, which is located in the heart of the city. The level of Chautauqua Lake, which must be maintained within certain limits in order to protect the property owners and communities surrounding the lake as well as to regulate the flow of the Chadakoin River, has been and must remain for all practical purposes dependent on the Warner Dam. This dam, built in 1916, should be rebuilt and maintained in order to adequately carry out its function in the future, by a responsible public agency.

These vital and necessary improvements have been requested by the city of Jamestown to become modifications to any proposed overall flood-control plan which would include as a part the suggested overflow dam at the northern end of Chautauqua Lake with a fixed sill at the maximum prescribed lake level. Similarly, the city of Jamestown has also requested full and complete information as to all details of the proposal, including copies of the plan, so as to permit an opportunity for study and the formulation of an informed position. To date, these requests have not been honored. In fact, I have been informed at no time have the United States Army engineers met with the officials of the city of Jamestown as such to discuss the formulation of their plans.

Consequently, the proposal has not been and could not have been formally considered further by the city of Jamestown, with the result that its official position remains as previously recorded. In order to clarify that position for purposes of this hearing, I should like to state that the Council of the City of Jamestown, which has informally authorized our appearance at this hearing because of the shortness of time, wishes to state opposition to the favorable consideration at this time of the United States Army engineer flood-control plan, as now presented, for the reasons that there has been a complete failure—

1. To provide for the improvement and continued maintenance of

the entire Chadakoin River and of the Warner Dam, all of which is vital to the city of Jamestown and to proper control of Chautauqua Lake;

2. To provide detailed information as to the plans and specifications of the proposed project as it now exists, and as to the cost which is to be borne by the local communities, including the city of Jamestown, and the State of New York; and

3. To define the resultant rights and duties in and to Chautauqua Lake and the Chadokoin River and the Warner Dam which would stem from the undertaking of such a project.

At this point I would like to say I have in my possession, but have only single copies, of resolutions which have also opposed this project. They are, namely, the Chautauqua Lake Association of May 11, 1954; the Chautauqua Lake Regents, Inc., November 23, 1953; and the Chadokoin River Commission, November 20, 1953.

The city of Jamestown is not appearing today merely for the sake of being opposed to this plan. We need and want every assistance to which we may be entitled and which will be of benefit to our city and its surrounding area. By the same token, we have a responsibility as has your body to seek and approve only those forms of assistance which are sound in principle so that they adequately meet and remedy a specific problem at a cost which justifies the expenditure. The present plan has not met this test and until it does to the satisfaction of those to be benefited, it should not receive your approval. We earnestly and sincerely invite the United States Army engineers to formally meet with the officials of all of the communities to be affected, to work with them in a good-faith effort to promote the welfare of our Chautauqua Lake Community, and to formulate final plans which realistically take into consideration all of the factors which are vital to our continued economic growth.

Mr. DAVIS. Thank you.

Without objection, the resolutions that you mentioned will be made a part of the record at this point.

(The resolutions are as follows:)

RESOLUTION BY COUNCILMAN LAWSON

Whereas the City Council of the City of Jamestown, N. Y., is in receipt of a notice dated February 1, 1954, from the Cincinnati office of the United States Army engineers advising that the district engineer and the division engineer have reported favorably on a flood-control plan for Lake Chautauqua and the Chadakoin River, which plan is briefly outlined in the notice referred to above; Now, therefore, be it

Resolved, That this council go on record as disapproving the Army plan as it is now proposed for the following reasons:

1. That this plan does not adequately protect the best interests of the city of Jamestown because it does not include the dredging or cleaning of the Chadakoin River. This river is the natural outlet for Chautauqua Lake, and it should be continued as such. It should be cleaned, dredged out, and otherwise improved its entire length so as to be able to handle properly and without flood the entire runoff from Chautauqua Lake.

2. That this plan does not take into consideration that the Chadakoin River is essential to our local industries both for water supply and for treated wastewater disposal. The volume of water in this river should be increased, not decreased. We are of the opinion that the channel of this river should be opened so that it can handle up to 2,500 cubic feet of water per second.

3. That no information has been made available to the officials of this city regarding what portion of the cost of construction or of the cost of operating

this project, if approved, is to be borne by the city of Jamestown or by Chautauqua County.

4. That the report of the Army engineers has never been submitted to the officials of this city for study. The notice received by this council advises as follows: "Copies of the report will not be furnished or loaned for use outside of these offices, but interested parties, including the press will be permitted to make such notes of the contents as they desire." It is the opinion of this council that the citizens of this community who are so vitally interested in this proposed project which the Army estimates will cost over $5 million, have not been given proper consideration when the complete report has not been made available to their elected local officials: Be it further

Resolved, That this council endorse and approve of the resolution of the Chadakoin River Commission dated November 20, 1953, and that the mayor of the city of Jamestown direct the filing of copies of this resolution with the following: Board of Engineers for Rivers and Harbors, Washington D. C.; Corps of Engineers, United States Army, Division Engineer, Ohio River Division, Cincinnati, Ohio; Representative Daniel Reed; Senator Irving Ives; Senator Herbert Lehman; New York State Flood Control Commission; Assemblyman E. Herman Magnuson; State Senator George H. Pierce; and Col. A. F. Dappert, New York State Water Pollution Control Board.

Carried 9 ayes 0 nays.

I, the city clerk of the city of Jamestown, N. Y., do hereby certify that the above resolution is a true and correct copy of a resolution adopted by the city council of the city of Jamestown at a regular meeting held on February 23, 1954.

[SEAL]

C. H. WATSON, *City Clerk.*

Whereas the flood-control plan, H. R. 685, formulated at the request of the city of Jamestown and the New York State Flood Control Commission for a flood-control plan, was rejected by the New York State Flood Control Commission as inadequate, and the modified plan submitted subsequently in May 1950, by the Army Engineers, is presently under consideration; and

Whereas the plans of May 1950, prepared by the United States Army Engineers and approved by the New York State Flood Control Commission failed to consider the original request of the city of Jamestown, and was prepared without further consultations with the city of Jamestown; and

Whereas encroachments by adjoining Lake property owners below the maximum level of 1,310 feet as established by the State of New York has contributed to the flood damages set forth in the report of the Army engineers; and

Whereas the modified flood-control plan fails to consider the following items, viz:

(*a*) The proposed plan does not provide for the flow capacity in the Chadakoin River Basin as originally requested;

(*b*) The proposed plan delegates the operational control of the dam to a State agency without defining damages liability for failure to operate the necessary controls;

(*c*) The proposed plan makes no provision for the cleaning and opening of the Chadakoin River outlet channel from Chautauqua Lake to the boatlanding and below the Warner Dam;

Whereas a capacity of 2,500 cubic feet per second has been determined by the Pittsburgh district office of the United States Army Engineers to be physically and financially impractical; and

Whereas after further study and reconsideration the Chadakoin River Commission, Jamestown Manufacturers Association, Jamestown Chamber of Commerce, Chautauqua County Federation of Sportsmans Clubs, Citizens Committee on Flood Control for Chautauqua Lake and the Chadakoin River, the Chautauqua Lake Association, and Chautauqua regions have determined that a channel capacity of 1,500 cubic feet per second will adequately provide for the local industrial uses and flood protection in conjunction with a diversion channel at Mayville, which capacity is feasible and practicable, and will eliminate the costly construction required for a larger channel capacity; and

Whereas the maximum flow of water through the Chadakoin River is vitally necessary to the local industries located on said river, and a capacity flow upward to 1,500 cubic feet per second is necessary to provide for the future industrial growth in Jamestown; and

Whereas the original sums of public funds to be expended according to the proposed plan will not provide the maximum benefits for the local areas to be benefited, the failure of the proposed plan to provide for future lake levels or encroachment, the placing of control of the dam in the hands of an agency which may not have a continuing interest, are all causes for great concern: Be it therefore

Resolved, That a copy of this resolution and request be forwarded to the Rivers and Harbors Commission before June 11, 1954, with the request that the present plan as established be altered and modified to include the following:

(1) That the diversion channel plans be modified to include an overflow dam at the northern end of the Lake with a fixed level or sill 1,309 feet above sea level.

(2) That the Chadakoin River channel be cleaned from Lake Chautauqua to as far below Warner Dam as necessary to assure a maximum of 1,500 cubic feet per second runoff of water.

(3) That the Warner Dam be rebuilt and that only the Warner Dam be operated to maintain the lake level at approximately 1,306 feet from November to April and 1308.3 feet from April to November;

(4) That an official lake level be set beyond which no further encroachment will be permitted; and be it further

Resolved, That the city clerk of the city of Jamestown be directed to mail a certified copy of this resolution to: Governor Thomas E. Dewey; Hon. Herbert H. Lehman; Hon. Irving M. Ives; Hon. Daniel A Reed, Congressman from 43d Congressional District; Chief of United States Army Engineers; Hon. E. Herman Magnuson; Horace Evans, chairman, New York State Flood Control Commission; and county supervisors.

Carried 9 ayes, 0 nays.

I, the city clerk of the city of Jamestown, N. Y., do hereby certify that the above resolution is a true and correct copy of a resolution adopted by the city council of the city of Jamestown at a regular meeting held on June 7, 1954.

[SEAL] C. H. WATSON, *City Clerk*.

Mr. SMITH. Is Jamestown in Chautauqua County?

Mr. JOHNSON. Yes, it is.

Mr. GRAY. Mr. Chairman, just one brief question.

Mr. DAVIS. Mr. Gray.

Mr. GRAY. Mr. Johnson, was there not a public hearing held by the Corps of Engineers on this matter?

Mr. JOHNSON. There was a hearing in which everybody had a chance to express themselves, but there was no meeting at which the local engineers could really go into a detailed study with the Army engineers.

Mr. GRAY. In what year was this hearing held? Do you know?

Mr. JOHNSON. If my memory serves me correctly, I think it was in September 1953. Yes, September 1953.

Mr. THOMPSON. Will the gentleman yield?

Mr. GRAY. Yes.

Mr. THOMPSON. Did your city council or your city officials receive official notice of these hearings?

Mr. JOHNSON. I cannot really say. I was not a member of the council at the time and I imagine some of them were in attendance. But how they were so notified I cannot really say.

Mr. THOMPSON. The Army engineers usually exhaustively go through their files and send out invitations. In many cases I have seen the list of names of the people to whom the invitations were sent, and it used up more pages than the invitation itself. They usually cover the area quite exhaustively.

Mr. JOHNSON. In my opinion, and from what I understand, it did develop into a general hearing in which it was difficult for our local people to get a detailed down-to-earth picture of what is being proposed.

Mr. THOMPSON. Did your engineers ever call on the Corps of Engineers representing that district to ask for such information?

Mr. JOHNSON. Just a moment. Do you know the answer to that?

Mr. BERGMAN. My name is Leonard A. Bergman, director of public works of the city of Jamestown.

Mr. THOMPSON. I am merely trying to find out if the city of Jamestown or the officials or the engineers of the city of Jamestown made any effort to work with or get information from the Corps of Engineers and, if you did, whether or not you were accommodated.

Mr. BERGMAN. Yes, indeed. There has been considerable harmony. There is no question about that. We cooperated with them and we maintain a weather station in the city. One of my departments has that responsibility. We worked constantly with the Pittsburgh district.

Mr. THOMPSON. The question is specifically on this particular project the witness stated that the engineers of the city of Jamestown had no opportunity to go into these plans because the Army engineers did not consult with them.

Mr. BERGMAN. I would say it was well broadcast or well known at the time of the hearings. I do not think anybody received special invitations, if that is what you mean. It was generally stated in the press and known through the city government that there was a hearing.

Mr. THOMPSON. My question is merely this, if you are in a position to answer it: The witness stated that the engineers or the officials of Jamestown had no opportunity to go into the detailed planning with the Corps of Engineers in order that they could give their views properly at the time of the hearing.

Mr. BERGMAN. That, I would say, is substantially so.

Mr. THOMPSON. Did your engineers ask for such information at any time?

Mr. BERGMAN. No; but we have tried to get it and have on occasion gone to the Pittsburgh district to get information. We have an established function of government, the river commission, which has gone on occasion to Pittsburgh to obtain such information which they think is vital to the city.

Mr. THOMPSON. Were you turned down in the case of this project?

Mr. BERGMAN. Well, there was some difficulty in getting this information.

Mr. THOMPSON. Do you have the records of any requests made of the Corps of Engineers, or anything like that?

Mr. BERGMAN. I do not have it, but it is a matter of record in the river commission, who have been delegated the duty and responsibility of studying this whole project.

Mr. BECKER. Will you yield?

Mr. GRAY. I have the floor. I yield.

Mr. BECKER. I know what Mr. Thompson is trying to get at. You are talking about the river commission, but this gentleman is testifying and we are trying to get at the vitally concerned area of the city of Jamestown. You are here to testify not about the river commission, but about the city of Jamestown, and you are talking about the river commission seeking information. The information we are trying to get here is, has this information been available to the city

of Jamestown, or has it not, in accordance with the testimony of the gentleman testifying here?

Mr. GRAY. I want to bring that out, too.

Mr. BECKER. Has the city of Jamestown had this information available to it? Have they been able to participate in hearings and express their feelings in the matter before the Corps of Engineers? Have they or have they not?

Mr. BERGMAN. It has been presented to us just as it has been presented to you briefly here today—by charts and maps.

Mr. BECKER. Then you had an opportunity to have your position heard, as you wanted to express it?

Mr. BERGMAN. We heard and made reports subsequent to these hearings to the Corps of Engineers.

Mr. BECKER. And you made your objections known to them?

Mr. BERGMAN. That is right.

Mr. BECKER. So that is somewhat contrary, I would say, to the tesmony of the gentleman here. Unless I am wrong, his testimony has dealt with the fact that you were not able to be heard and you were thwarted in your efforts to get your plans and objections over, and you say entirely different. Your statement is entirely contrary.

Mr. GRAY. The essence of the thing is they do not agree with the findings.

Mr. BECKER. That is right.

Mr. GRAY. That establishes whether or not they had their day in court. I yield back my time, Mr. Chairman.

Mr. DAVIS. How did that finally come out?

Mr. GRAY. They had ample opportunity.

Mr. DAVIS. They did have ample opportunity?

Mr. GRAY. Yes.

Mr. MACK. What is the population of the city of Jamestown, Mr. Johnson?

Mr. JOHNSON. It is slightly over 43,000, and I think for the sake of Mr. Becker, it is in a hilly area. The Chadakoin River does run through a valley, The Chadakoin River is very important to the industrial life of Jamestown.

Mr. MACK. Does damage from floods occur in the city of Jamestown?

Mr. JOHNSON. Yes, because the Chadakoin River does need some dredging and deepening to allow a flow which will accommodate the industrial concerns.

Mr. MACK. The statement of the Army engineers is to this effect:

Local cooperation: Provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; bear the expense of all necessary highway, utility, and sewer alterations, and necessary repairs to Warner Dam; hold and save the United States free from damages due to the construction works; maintain and operate the works after completion; and establish and enforce regulations to prevent encroachment on the lake and streams involved.

As to this local cooperation, will it be necessary for the city of Jamestown to participate in providing thelocal cooperation mentioned here?

As to this local cooperation, will it be necessary for the city of Jamestown to participate in providing the local cooperation mentioned here?

Mr. JOHNSON. Would it be necessary, you say?

Mr. MACK. Yes.

Mr. JOHNSON. Yes, because something should be done with the Chadakoin River below the Warner Dam.

Mr. MACK. If it is necessary for the city of Jamestown to provide part of this cooperation, with your mayor and council feeling the way they do about this project, then it is very probable that the city of Jamestown will withhold its local cooperation even if the project were approved, thus in effect thereby killing the project?

Mr. JOHNSON. No. We have not taken such a stand as that, but we feel this way: We do not feel this plan should go into operation without the Army engineers taking into consideration that portion of the Chadakoin River below the Warner Dam.

Mr. MACK. You want the committee to delay action on this project in order to have a more thorough review of it?

Mr. JOHNSON. We feel if the Army engineers would come in and discuss with our own engineer what our particular problem is—we feel it should be a part of this overall program.

Mr. MACK. That would require several months and would delay the project through this year. You would prefer to see the project lay over 1 year rather than put it through?

Mr. JOHNSON. Yes.

Mr. BECKER. Will you yield?

Mr. MACK. Yes.

Mr. BECKER. What is this dredging of the water of the Chadakoin River mentioned by the gentleman here, and why has it not been included in the project, or can he give us any reasons on that?

Mr. ADAMS. The plan we propose would regulate discharges from Warner Dam to 1,000 cubic feet per second, which is the estimated flood damage stage in the Chadakoin River below Warner Dam. As long as flows are regulated to nondamageable flows, there should be no flood problem below Warner Dam.

Mr. BECKER. But the gentleman raised the question of the dredging of the Chadakoin River in this area, which would have little to do with the dredging as far as I can see insofar as floods are concerned. We are talking about dredging of the river.

Mr. JOHNSON. In other words, we feel on behalf of the industrial firms of Jamestown that we need for industrial use. It is not a case of shutting the water off. We do not want it shut off because we need it, but we want it under control.

Mr. BECKER. We are not discussing the question of shutting the water off and how many cubic feet per second of water should go through, but discussing the depth of the water,

Mr. JOHNSON. That is right. So there is a flow of water through our plants.

Mr. BECKER. Is anything being done about that?

Mr. ADAMS. Yes, sir. Our regulation plan provides for the release of 60 cubic feet per second from Warner Dam, ranging down to a minimum of 20 cubic feet per second in drought periods.

Mr. BECKER. From 60 down to 20?

Mr. ADAMS. That is right.

Mr. BECKER. That is the regulation of the flow. What does that have to do with the depths?

Mr. JOHNSON. According to my understanding—and I am not an engineer—but the proposed dam at the northern end of Chautauqua

Lake would have a sill lower than Warner Dam and consequently at a low level the water will flow that way rather than toward Jamestown.

Mr. BECKER. It would flow that way?

Mr. JOHNSON. Toward Lake Erie.

Mr. ADAMS. The dam on the diversion canal at Lake Erie would be gated. No water could flow to Lake Erie unless the gates were open. It is true the sill is at a lower elevation than the sill at Warner Dam.

Mr. BECKER. That is all, Mr. Chairman.

Mr. SCUDDER. I would like to ask Mr. Adams two questions. In the overall cost of this project what is the cost of the improvement at Jamestown? Do you have it broken down? There is work to be done at Jamestown in deepening which would more likely satisfy them as to what is necessary. And the other question is what is the cost of the project for the diversion channel into Lake Erie?

Mr. ADAMS. I have that cost here, but I will have to look it up. I think it breaks down to about 90 to 95 percent of the total cost being in the diversion to Lake Erie.

Mr. SCUDDER. 95 percent of the cost?

Mr. ADAMS. Yes, sir. I will check that figure. We have the figures here.

Mr. SCUDDER. Then I would like to ask the acting mayor of Jamestown, would your people be satisfied with improvements at Jamestown rather than the large outlay for the other sector? Is that the argument you have?

Mr. JOHNSON. That is right. We prefer the improvements—while we are not opposed to this plan entirely, but we feel it should be modified to take into consideration the Jamestown end of the Chadakoin River.

Mr. SCUDDER. Would the Jamestown work below Warner Dam take care of the major trouble?

Mr. JOHNSON. Yes. We feel the Warner Dam should be rebuilt. We also feel this diversion dam at the northern end of the lake, if it had the same sill as the Warner Dam, then in case of a flood if they felt they wanted to release the water more quickly they could make those gates wider and it might accomplish the same thing.

Mr. BALDWIN. May I ask what percentage of the total population of the county resides in the city? You mentioned you have over 40,000 in the city. What is the population of the whole county involved?

Mr. JOHNSON. The whole county involved?

Mr. BALDWIN. Yes.

Mr. JOHNSON. Jamestown has 43,000. The next largest community on the lake is Lakewood, which has 3,000.

Mr. BALDWIN. But what is the population of the county as a whole?

Mr. JOHNSON. I would say almost 50 percent of the people live in Jamestown.

Mr. BALDWIN. My second question is that I understand the board of supervisors are unanimously for this project. Are part of the supervisors people who represent Jamestown?

Mr. JOHNSON. Jamestown is represented on the board of supervisors by 6 individuals out of 36.

Mr. BALDWIN. But as I understand it the board of supervisors unanimously favored this project?

Mr. JOHNSON. I do not have the opinions of the Jamestown supervisors on that.

Mr. BALDWIN. I do not have any further questions.

Mr. BECKER. The supervisor is still here. He made a statement, or I believe he did, that the board of supervisors of the county was unanimous on this project. Did you say that?

Mr. LOOMIS. That is correct.

Mr. BECKER. And six of those representatives are from the city of Jamestown. Is that correct, Mr. Loomis?

Mr. LOOMIS. Yes, sir.

Mr. GRAY. How many members are on the board?

Mr. LOOMIS. Thirty-six.

Mr. BECKER. And six are from Jamestown and they agree with the plan. There seems to be a conflict of opinion. That is all, Mr. Chairman.

Mr. DAVIS. Thank you, Mr. Reed. That concludes the hearing.

Mr. REED. If you will just permit me a half minute. I have been very interested in all this testimony, but there is one thing I want to point out. There can be a great development, if this situation is solved, all around Lake Chautauqua. 50,000 people move into the area of Lake Chautauqua every year. The original Chautauqua Institution is located there and it is attracting people from all over the world. A rollcall at the Chautauqua Institution had a representative from every civilized nation in the world. They come there every year.

I only mention that because if the flooding continues naturally it will stop development around the lake. It is up to the committee and the Army engineers and others interested here to resolve this problem. I am not trying to do it because I am not an engineer.

Mr. SMITH. I think the point Mr. Reed made is very good. He made it very clear that the whole country has an interest in this project because there is no part of the United States where we have a Chautauqua.

Mr. DAVIS. The major also said he is willing for this committee to decide this controversy. That was his last and parting statement. I had come to that conclusion, Major, sometime back. We are not going to ask you for your position on this matter because they are all your friends.

Mr. REED. Thank you very much. Mr. Chairman, I would like to request that I be permitted to insert in the record a telegram addressed to me signed by George F. Eckbloom and dozens of Elmwood Avenue residents in Falconer.

Mr. DAVIS. Without objection the telegram may be made a part of the record at this point.

(The telegram referred to is as follows:)

JAMESTOWN, N. Y., *April 30, 1956.*

Hon. DANIEL REED,
House Office Building,
Washington, D. C.:

Please inform Army engineers hearing today that we urge support of their program for Chautauqua to remedy the stinking mud we have today in our cellar as a result of high waters again this spring. We trust the Army's plan for flood-water control will be approved.

GEORGE F. ECKBLOOM,
(And dozens of Elmwood Avenue residents in Falconer).

Bayou Chevreuil, La.

Mr. Davis. We will take the next project which is Chevreuil Bayou, La. We want to hear from Mr. Weber of the Corps of Engineers on this. I think you can tell us what the damage is rather quickly. They have some land enhancement there and flood damages which give a benefit-cost ratio of 2.08 to 1. We want Mr. Thompson to handle this situation in the absence of Mr. Boggs and Mr. Willis of Louisiana.

STATEMENT OF EUGENE W. WEBER, CORPS OF ENGINEERS, UNITED STATES ARMY

Mr. Weber. Mr. Chairman, I am Eugene W. Weber of the Corps of Engineers, Special Assistant to the Assistant Chief of Engineers for Civil Works. Mr. Chairman, Bayou Chevreuil is in southeast Louisiana. It is a stream about 35 miles long, lying between the Mississippi River and Bayou Lafourche. This entire drainage is 250 square miles, or about 160,000 acres. Of this 160,000 acres about 100,000 or five-eighths are low-lying and subject to almost continuous flooding.

At the edges of this 100,000-acre swampland we have a problem of about 7,000 acres of overflow from floods and about 10,000 acres that are poorly drained. To meet this problem we have to provide additional channel capacity in Bayou Chevreuil. The plan for doing that is to clear and snag the channel and straighten it and dredge it and provide an adequate cross section so that the outlying areas will drain through laterals into this main drainage channel and into Lac des Allemands.

The project divides itself into two parts. There is a Federal project which consists of the main channel. It is shown in dark green on the map. That project would cost $795,000 at current prices, which is incidentally a reduction from the estimate in the report. Whereas costs have gone up generally about 10 percent since the time of this report, we found that the experience in dredging of this type, on which a lot of work has been done recently in this area, has permitted us to be more optimistic about prices and we have been able to reduce the estimate.

Mr. Smith. If we delayed this further perhaps the price estimate might go down again.

Mr. Weber. I would not hope for that.

Mr. Thompson. I might state that is an indication of the efficiency of industry in Louisiana.

Mr. Weber. The other part of the work that would be necessary besides the Federal major drainage channel would be the laterals, which would be a required item of local participation, to be built by the local interests, and would consist of these channels shown in dotted green on the map. They include lateral collecting channels near the edges of this swampy area and the channels draining into the main channel.

The total cost of that work which would be similar to the main channel work of clearing, snagging, and dredging, would be $574,000.

Mr. Thompson. That is paid for by local interests?

Mr. Weber. Paid for by local interests. Yes, sir. That gives a total estimated cost for this project at current prices of about $1,369,000. But in addition to the local interests paying for all of the work

of these laterals, because of the land-enhancement benefits involved as distinguished from the flood-prevention benefits, they would be asked to make a cash contribution of $234,000 if the costs worked out as estimated.

Roughly it would be 29 percent of the cost of the Federal project plus all of the cost of the non-Federal project making a total of $822,000 to be borne by the local interests.

As the chairman observed, this project has a benefit-cost ratio of 2.08 based on the current figures.

I should mention one other feature of the project, Mr. Chairman. It has had the endorsement of the State of Louisiana and Department of Public Works, and has been commented on by the other Federal agencies concerned. They are satisfied in general. The Bureau of the Budget indicated it has no objection to the report but it could not make a commitment as to appropriations.

One development since the submission of the report is very pertinent. This work is part of a broad program that is being undertaken in Louisiana and adjoining areas also to some extent. Because of the urgent need from the standpoint of these local interests they have instituted at their own expense the construction of the lower 11 miles of this proposed Federal project. It amounts to about half of the dredging involved; 1½ million yards out of the total 3 million yards in the Federal project are now being undertaken by the local interests. They have requested that consideration be given to having the flexibility of their utilizing that work in lieu of the cash contribution.

The work, if accomplished as they have now begun, would be more than the 29 percent contribution that has been proposed in the report.

I think that completes the presentation.

Mr. DAVIS. It would be complicating it at this point when we are getting along so fine.

Mr. THOMPSON. I might state this, if it would clarify matters. As far as my position is concerned, the benefit to me is nothing at all because that area is not in my district. But inasmuch as we are developing other parts of the world and the United States, and this project shows such a favorable ratio I would certainly recommend that this committee give it serious consideration. I would like to ask the chairman's consent to allow Congressman Edwin Willis to insert a statement into the record for the benefit of the committee. He is at another committee meeting this morning and asked that I make that request for him this morning.

Mr. DAVIS. At this point in the record it is so ordered.

Mr. DAVIS. My statement about the confusion was simply a compliment really to Mr. Weber. Mr. Weber stated that what the local interests in Louisiana were doing on that 11 miles would amount to far more than the cash contribution of 29 percent which would be required of them on this project. My reference to confusion was that now we will have to get some language in there to take care of it. It would have been so much smoother if we had not raised that point.

Mr. THOMPSON. I am certainly glad to see that Louisiana is leading the way, although it is putting a burden on future projects, by paying more than its fair share of the projects.

Mr. SCUDDER. I think if we continue to get the swamps out of Louisiana, in one place you have to hold it back and in the other place

you have to dry them out. So I imagine it is a very worthy project, although the thought of paying for work already done, which is experimental, might start another precedent because you have people who tried to do the work themselves and they found out they could not do it and had to come in and ask the Federal Government to take it over.

Mr. THOMPSON. I see my distinguished colleague from Louisiana has finally broken away from his committee. I have already gotten permission for you, Mr. Willis, to insert a statement in the record. Would you care to make some statement here?

Mr. WILLIS. I am sorry to be late but I had to break away from my own committee.

I am very much interested in the Bayou Chevreuil project which pertains to part of my congressional district in Louisiana and which is designed to provide drainage for the area north of Lake Des Allemands between the Mississippi River and Bayou Lafourche and drains portions of the parishes (counties) of St. John, St. James, Lafourche, Ascension, and Assumption, in Louisiana. Owing to the urgent need I wish to most strongly urge favorable action to expedite Federal assistance in this matter in which the State of Louisiana is cooperating and has already provided funds to take care of one of the most pressing and immediate problems through channel enlargement. I trust that the entire project can be brought to realization with all possible speed as it means a great deal to the welfare of a large number of our people in Louisiana who would benefit greatly from the results of this overall drainage program.

Mr. DAVIS. You arrived here just in time, but we are certainly glad you got here.

Mr. WILLIS. Thank you, sir.

Mr. DAVIS. Because I think everyone is convinced this is a good project. Are there any questions?

Mr. GRAY. Mr. Chairman, I have one very brief question. What is most of this land being used for that borders this Bayou Chevreuil?

Mr. WEBER. It is wooded area. Out of the total 160,000 acres, approximately 100,000 acres adjacent to the stream are wooded. This area is overflowed and flooded and drained so poorly that it is usable only for timbering purposes. The other 60,000 acres on the higher ground away from the streams is the usable area, where the threat of overflow and lack of drainage hamper agriculture.

Mr. GRAY. Thank you.

Mr. DAVIS. Mr. Weber, you did not have quite as tough a one as Mr. Adams. I do not want what I said earlier today, Mr. Adams, to cause you to feel badly at all. As it developed we see even Major Reed was perfectly willing to let this committee make a decision, and I do not think we will have much difficulty in deciding it. However, I wanted to make that clear for Mr. Adams because we get along so well with the other personnel of the Corps of Engineers and we do not want General Itschner to think otherwise. However, we did get a slow start but were certainly rewarded by the splendid statement of General Itschner. I have said that about 4 or 5 times, but I think it requires emphasizing.

Do you have another question, Mr. Gray?

Mr. GRAY. Not a question Mr. Chairman, but I want to say I was indeed sorry I could not be here at the start of the hearing today, and

I would like to have a copy of that statement to read, and I am sure other members will too.

Mr. DAVIS. We have arranged to get copies as quickly as possible, and maybe we will have them tomorrow. I think all of us will be using the information in it for years to come, both at home and abroad.

The committee stands adjourned until 10 a. m. tomorrow morning.

(Whereupon, at 12 noon, the subcommittee adjourned until 10 a. m. the following day, Wednesday, May 2, 1956.)

FLOOD CONTROL OMNIBUS BILL

WEDNESDAY, MAY 2, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10 a. m., in room 1302, New House Office Building, Hon. Clifford Davis, chairman of the subcommittee, presiding.

Mr. DAVIS. The committee will resume its hearings in connection with projects which may be included in the omnibus flood control bill for 1956.

EAU GALLE RIVER, WIS.

The first matter this morning is the Eau Galle River, Wis., a matter in which our colleague, Lester Johnson, has been intensely interested. He has been after all of the members of this committee to give him a hearing. We are delighted to have him here this morning. However, it is our custom to hear from the Corps of Engineers first, and I see that Mr. Joseph Brennan is prepared to report to this committee. Is that right, Mr. Brennan?

STATEMENT OF JOSEPH R. BRENNAN, CORPS OF ENGINEERS

Mr. BRENNAN. Yes, Mr. Chairman.

Mr. DAVIS. If you will come around, we will make some progress.

Mr. BRENNAN. Mr. Chairman and members of the committee, this project is for flood control in the Eau Galle River Basin in west central Wisconsin. It is contained in Senate Document 52 of the 84th Congress which was submitted to Congress on the 16th of May 1955.

The Eau Galle River rises in west central Wisconsin and flows west and east for 50 miles to its junction with the Chippewa River at a point 16 miles above its mouth. Its junction with the Mississippi River is located about 70 miles downstream from Minneapolis and St. Paul.

The basin itself is principally rural in character. It is supported by trades and industry which are devoted to agricultural purposes. The flood problem arises from the fact that the floods are very flashy. They rise and fall within a matter of a few hours and may reach a height of 10 to 11 feet above the normal flow. The population of the basin is about 9,300. There are two main towns located along the river. One is Spring Valley, river-mile 30, and the other is Elmwood, about 10 miles downstream.

The principal flood-damaged area is located between these two towns and in the towns and in the adjacent agricultural areas.

The major flood which occurred in this basin over the period of record happened in September 1942. It caused a discharge of 33,000 cubic feet per second, which is about 6 times the normal within-bank discharge. It flooded the entire town of Spring Valley and many agricultural areas downstream, and a part of the town of Elmwood. The total damage caused by this flood based on 1948 prices, at the time the survey report was prepared, was $2,278,000, of which $1,174,000 was located in the town of Spring Valley itself. In addition to that flood there have been numerous other floods over the past 50 years, totaling about 1 every 3 years, of which about 1 every 6 years was quite serious.

The total annual damage based on current prices is computed to be $290,000, of which $240,000 is attributable to damage within the town of Spring Valley.

Various plans were investigated for the solution of this problem and the most feasible was found to be the construction of a dam above Spring Valley, the construction of an improved channel for about one mile and a half below the dam, and improvements of two small creeks entering from the west—Mines Creek and Burghardt Creek.

The total Federal cost of the combined improvement is $7,235,000, of which $6,695,000 is Federal and $545,000 is local.

The benefit-cost ratio is 1.03.

A distinguishing feature with respect to local cooperation is the fact that in this project local interests are required to pay for the lands and rights-of-way in the reservoir area, which is not normal in most flood-control reservoir projects.

A report was submitted to the Bureau of the Budget as well as to the State of Wisconsin and other Federal agencies, and all these agencies concurred in the plan as recommended by the Chief of Engineers.

That completes the presentation, Mr. Chairman, unless there are questions.

Mr. DAVIS. Are there any questions from either side of the committee?

Mr. BUSH. I might ask what are the improvements on these creeks you contemplate making that enter from the west?

Mr. BRENNAN. The improvements on Mines Creek, which is the northernmost of those entering from the west, are a new bridge, a drop structure, levees in low places, removal of a railroad bridge, and various other channel improvements to straighten it out.

On Burghardt Creek, which is the most southerly of the two western tributaries, there is certain work in connection with the control of the stream, such as drop structures, a new bridge at this point here, and levees along low places, and straightening and widening the channel at constricted areas.

Mr. BUSH. With those improvements do you think the water will be able to get away faster? Is that the purpose of it?

Mr. BRENNAN. That is one of the purposes, sir. The other is to prevent overflow within the area developed along these two creeks. The slope of these creeks is about 80 feet per mile in the upper reaches.

The water has a very fast velocity now and it is more a matter of keeping it in the channel as it approaches the main Eau Galle River.

Mr. BALDWIN. Mr. Brennan, we had one project yesterday on which there seems to be quite a split of opinion among the local people involved. Can you tell us whether there is a fairly unified opinion in favor of this project by the local people affected both above and below?

Mr. BRENNAN. Yes, sir. This is one of the most unified local projects we have. The town of Spring Valley is intensely interested in this project. The agricultural areas downstream and the town of Elmwood are also interested. They are quite willing and anxious to pay for the local cooperation required and have willingly agreed to the requirement that they pay for the cost of the reservoir lands, which, as I pointed out, is not usual in flood-control reservoirs. They have visited our St. Paul district office and discussed the matter on many occasions, and the interest among the local people is as great as any I have seen.

Mr. MACK. Mr. Brennan, I note that the benefit ratio is rather low, as compared to the cost. Is it probable that industrial expansion will occur in this region to result in future floods to do a great deal more economic damage than past floods have?

Mr. BRENNAN. There will be some expansion. After reconstruction of the main part of the town in 1942 following that tremendous flood that they had there, there was a period when the town was, so to speak, discouraged. But after some years development and reconstruction went on. We have found in the last few years since the submission of this report that there have been additional improvements put in. New buildings and new business establishments have been put in. However, there is not a great deal of room for expansion because the town is located in a very narrow valley between bluffs which are approximately 200 feet high.

Mr. MACK. Are there industries in the community which are damaged by the floods?

Mr. BRENNAN. Yes, sir. There are industries such as feed mills, dairy plants, and other businesses which are part of the trade center, which serves an area of about 10 to 15 miles around. The entire town of Spring Valley was flooded from bluff to bluff in the 1942 flood, and the water went down the business street 9 feet above the level of the road.

Mr. DAVIS. Thank you, Mr. Brennan. We have our colleague, Lester Johnson, here, from Wisconsin. Would you like to make a statement now?

STATEMENT OF HON. LESTER JOHNSON, MEMBER OF CONGRESS FROM THE STATE OF WISCONSIN

Mr. JOHNSON. Yes, sir. As soon as Mr. Brennan is finished.

Mr. DAVIS. He has finished and the committee has concluded the questioning of him. We know how hard you have worked on this project. Our colleague, Mr. Smith over here, reminded me again that you have been after all of us. I do not think that you have missed a day talking to one of us, so we are delighted to give you all the time that you require.

Mr. JOHNSON. Mr. Chairman, before starting my statement I might say last night at 12 o'clock the telephone rang in my house and the mayor of Spring Valley called me on the phone and wanted to know how everything was going. So there is certainly local interest back there.

Mr. Chairman and members of the Public Works Subcommittee on Flood Control, I wish to thank you for the opportunity to appear before you today in support of the Eau Galle River flood-control project as outlined in Senate Document No. 52 and provided in my bill, H. R. 6959, introduced on June 22, 1955.

I shall give you a brief history of the project, together with the actions taken by the community of Spring Valley in preparation for the project. I want to commend the Corps of Engineers for the thoroughness of the work they have done on the survey of conditions in the Eau Galle River Basin in the past 14½ years. They have recommended adoption of the project—I might say here, my figures differ from those of the Corps of Engineers because with the rising costs I took the figures as given by the Bureau of the Budget in their letter—at a total estimated cost of $6,901,600, of which $6,385,300 is Federal and $516,300 in non-Federal, to build a reservoir in the vicinity of Spring Valley, along with channel enlargement of the Eau Galle River and channel rectification work on Mines and Burghardt Creeks.

The headwaters of the Eau Galle River are at Woodville, Wis., in St. Croix County, to the north of Spring Valley. The river flows 50 miles southeast to its junction with the Chippewa River. The drainage basin of the Eau Galle River comprises 230 square miles, with approximately 90 percent of the area consisting of farms, averaging about 140 acres in size. The village of Spring Valley is located in western Wisconsin in the narrow valley of the Eau Galle River between steep limestone bluffs and at a point where two creeks, the Mines and Burghardt, which drain small valleys to the west of the village, join the Eau Galle River.

The worst flood conditions in the Spring Valley area occur when rains start high crests in the north and then work south and the high crest of the Eau Galle River merges with the two small creeks at Spring Valley.

I might explain on the map. The local people tell me if the rains start to the north and work south then the high crest hits Spring Valley at the same time as the high chest here. When you get that condition they get the same condition that they had in 1942, because you get the high crests of three creeks and the river at the same time.

Floods on the river are usually flashy in character and are associated with periods of rapid snow melting and rainstorms of above average. River stages which normally fluctuate within a range of about 5 feet may rise 10 or 15 feet in a few hours and recede almost as quickly.

The history of the community of Spring Valley reveals that flood records date as far back as 1894 and describe damages to roads, bridges, homes, and business places. One death is directly attributed to the flood of 1934 and two deaths are linked indirectly to the disastrous flood of September 1942. Dates of maximum known floods, elevations of high water at mile 29.5 are listed in table 3. This table was taken from Senate Document 52.

TABLE 3.—*Maximum flood data, Eau Galle River at Spring Valley, Wis.*

Item	Elevation in feet above mean sea level 1929 adjustment (mile 29.5)	Discharge (second-feet)	Item	Elevation in feet above mean sea level 1929 adjustment (mile 29.5)	Discharge (second-feet)
September 1942	926.0	33,000	March 1901	918+	8,400
September 1938	922.0	19,700	May 1901	918+	8,400
May 1942	920.5	15,000	July 1923	918	8,400
October 1911	920.3	14,400	June 1903	917+	6,400
August 1907	920.0	13,600	August 1903	917+	6,400
April 1934	920.0	13,600	July 1938	917	6,400
July 1903	919.0	10,900	Flood stage	915	2,400
June 1894	918.0	8,400			

The community of Spring Valley has been fortunate to date this year in that no serious floods have occurred yet. However, the Spring Valley Sun for April 12, 1956, carried the story that the river had risen 2 feet and that sufficient water was flowing under the bridge in 1 hour to supply the complete needs of Spring Valley for 3 years. That is a lot of water.

The two worst floods ever experienced in the village of Spring Valley occurred in the year 1942. The first was in May 1942, following an 8-inch rainfall. According to reports, the flood lasted from 10 p. m., May 29, to about 1 a. m. the next day. High flows exceeding channel capacity on both Mines and Burghardt Creeks at Spring Valley were described as occurring in advance of the main flood on the Eau Galle River. The peak discharge at Spring Valley, estimated from high-water marks, was about 15,000 second-feet. Damages to homes, business establishments, and public buildings in Spring Valley were reported. Downstream from the village, railroad embankments and highways were washed out, bridges were damaged, and cultivated fields inundated.

The second flood came on the night of September 17, 1942, and was the worst experienced in the history of the river. Residents of the Eau Galle Valley had hardly recovered from the flood in May when they were deluged again. Rains had brought the river to above flood stage on September 16, but little damage was reported until the evening of September 17, when a period of intense rainfall caused the river to rise rapidly to a record stage about 5.5 feet above the crest elevation of the May flood. Reports indicate that the flood was of about 16 hours' duration, rising rapidly after 8 p. m. to crest at an elevation of about 926 about 11 p. m. at Spring Valley, and returning to normal the next day. Maximum discharge at Spring Valley was about 33,000 second-feet and the flood volume represented a runoff of about 3.8 inches over the drainage area above Spring Valley. Unusually high flows exceeding channel capacities were reported on both Mines and Burghardt Creeks. Few buildings in Spring Valley escaped damage as the flood wave moved through the community at a height of about 9 feet above the elevation of the main business street.

Sixteen residences and 19 business buildings were completely destroyed, the average damaged home and public building could not be reoccupied for about 30 days, and many business establishments

were inoperative for a much longer period. The magnitude of the disaster is indicated by the Red Cross relief expenditures which totaled about $25,000, additional Federal aid of approximately $7,000 and the fact that 50 convicts from the State prison worked for nearly 3 months on rehabilitation work.

At this time, I would like to quote briefly from an article in the Lions International of March 1950, entitled "The Town That Wouldn't Be Licked." I believe the article gives an excellent picture of the real community spirit of this remarkable town.

Shortly before 10 o'clock on the night of the 17th of September, a 16-foot wall of water swept down upon the defenseless community. Forty minutes later, there was little of beauty or hope left in the devastated slime-covered village. Engineers and newsmen agreed that the village would never rise again. But 24 hours later Spring Valley had a slogan and a plan—two slogans, as a matter of fact: "There will always be a Spring Valley" and "The town that wouldn't be licked." Spring Valley would like to forget the next 6 years. Staggering under a $6 million loss and the departure of many energetic citizens forced to leave by economic necessity, recovery was pitifully slow.

Official figures for the 1942 damages are listed on page 16 of Senate Document 52.

The flood of September 1942 resulted in damages totaling $1,558,100, of which $1,280,000 is classified as recurrent and $278,100 is nonrecurrent. Of the recurrent damage, $1,034,200 occurred in Spring Valley, $26,100 in Elmwood (a village 10 miles down the river), $116,100 to agriculture, and $103,600 to roads and bridges. Based on 1948 prices and on future growth, excluding roads and bridges, the estimated damage from a flood of the same magnitude amounts to $2,634,000, of which $2,108,000 would occur in the village of spring valley, $51,980 in the village of Elmwood, $292,200 to agriculture and $180,500 to roads and bridges in rural areas.

The cost of replacing the highway bridges by the village, county, and State total $587,300. The cost of repairing the Eau Galle Dam was $64,000. The cost of straightening of Burghardt Creek and dredging the river, $26,000. The cost of betterment of health and sanitation of the village of Spring Valley in the way of physical plant improvements was $276,000. A recurrence of a similar flood at present prices would very well nearly double the costs of replacements.

Faced with the almost insurmountable task of rebuilding the village, the people of Spring Valley lived up to their name, "The Town That Wouldn't Be Licked." Because the story is so remarkable, I would like to quote again from the Lions International article:

But early in September 1948 the newly organized Spring Valley Lions Club proudly announced to the world that the Farmer's Day, postponed from 1942, would be held almost on the exact anniversary of the great flood. That was a triumphant day, indeed. Newspapers and magazines from coast to coast hailed the great achievement of a community which wouldn't be licked.

But Spring Valley was still a shabby village. A year ago the restless Lions decided to do something about it. What they did constituted a cleanup campaign the likes of which the Nation has never witnessed. New streets, new buildings, new flower beds, and public works sprang up overnight. So proud were the Lions that they sent a complete photographic record of the transformation to the cleanup bureau at Washington.

Early in November the press wires and the radio buzzed with the amazing news that "the town that wouldn't be licked" had been cited as one of the Nation's cleanest towns.

In an emergency session the young Loans voted unanimously to celebrate the two awards—a beautiful trophy for second place and a special award created by the committee of J. A. Krug, then Secretary of the Interior, for Spring Valley's courageous and almost miraculous recovery—at a cleanup banquet to be held in the new village auditorium. Notables from far and wide were to be invited. So were neighboring Lions Clubs.

Nothing like it had ever been attempted in this small community. The feeding of almost 600 people, the staging of a historic musical narrative, was a tremendous task. So well was the event organized that every plate was filled with chicken and the trimmings 20 minutes after the guests sat down.

For narrator of The Spring Valley Story the Lions of this largely Lutheran community chose former Spring Valley Catholic Priest Father George Hardy, now of Clayfield. It was Father Hardy who lost a wonderful $25,000 rare book collection in the great flood. It was Father Hardy who put on overalls next day and helped the Masonic Lodge put their house in order, and in return the grateful Masons helped him restore his altar so he could hold services the following Sunday.

Ever since the floods of 1942 the people of Spring Valley and Elmwood have been anxiously awaiting the approval of the porposed project. Every spring and fall when that area experiences flood conditions they have feared another flood like that of September 17, 1942.

I would like to add at this point that the Army engineers in their survey went very thoroughly into the matter of relocating the village, but costs of relocation are more expensive than flood-protection measures recommended, and the residents want to stay in their town. Further, this would not alleviate flood danger to Elmwood and the rest of the valley, both residential and agricultural.

The people of Spring Valley have not stood idly by, but have gone ahead with many of the proposals outlined by the Corps of Engineers as a condition to the participation of the Federal Government in the project. I would like to list several of these for you.

For the channel improvements, the plated property has been purchased. For the relocations, there is a farm access road to Mines Creek and the bridges have been completed. The railroad bridge will be removed and the required Y-modifications done by the railroad. The McKay Avenue Bridge on Mines Creek will be built by the county. The water main across Mines Creek will be done as suggested. The Harrison Avenue Bridge on Burghardt Creek has been completed. Northern States Power Co. has agreed to reset the lines at a nominal charge as to poles needed. The telephone lines are inadequate and will be reset.

The village has agreed to purchase the land for the reservoir. I am told by the Corps of Engineers that this is not the customary procedure; usually the Federal Government bears this cost. However, the people of Spring Valley are so anxious to do everything possible to facilitate this project that they readily agreed to do this.

They have also agreed to have the powerlines, telephone lines, and highway relocated so that they will not interfere with the proposed dam and channel widening.

A survey has been made of the cost of improvements in Spring Valley since the flood. The findings are as follows: Business places, $657,000; residential, $365,650; utilities, $276,000; schools, $185,000; industries, $325,000; these figures do not include the replacement of merchandise in business places or furniture and fixtures in the residences, nor do they include an estimated $80,000 for proposed high-school expansion.

Mr. Chairman, this project has been pending since October 28, 1941, even before the disastrous floods of 1942. The problem is too great for the residents of the area to handle without Federal assistance. Following the flood in July 1938, local interests deepened and widened the channel through Spring Valley, but the levee was washed out in

September of that year. There are now no flood-control improvements in the basin. I understand that the war stopped action on this and other flood-control projects. Although the original survey was a review of flood conditions on the entire Chippewa River and tributaries, the Eau Galle project is the only part which has received approval on all levels. The Department of the Army, the Bureau of the Budget, the Wisconsin State Planning Board, the Interior Department, the Department of Agriculture—all agencies, Federal and State, involved in any way on the proposed flood-control project, concur in the views or have no objection to the project.

I believe J. S. Bragdon, chairman of the Board of Engineers for Rivers and Harbors summarized the situation very well when he stated:

> The Board concludes that the evaluated benefits in conjunction with the intangible benefits such as the prevention of the loss of life, removal of the hazards of epidemics, and the enhancement of the general welfare and security of the inhabitants are sufficient to justify the construction of the improvements.

Final action on this worthwhile project is long overdue. I sincerely hope this committee will favorably consider the project at this time and will include H. R. 6959 in the omnibus bill to be reported by the committee.

I want to thank you again for giving me the opportunity to present the case for the residents of Spring Valley and Elmwood. Because of the great travel distance and cost of transportation involved, local residents are not appearing before the committee, but at this time I would like to present petitions signed by residents of the area of Spring Valley and Elmwood in which they petition you for favorable action on this project of such vital concern to them.

Mr. DAVIS. Off the record.

(Discussion off the record.)

Mr. JOHNSON. I make the request that I be allowed to revise and extend my remarks.

Mr. DAVIS. Without objection, it is so ordered. Do any members of the committee have any questions to ask our colleague, Mr. Johnson?

Mr. JOHNSON. There is one thing I did not go into and that is the fact that the city has gone ahead and made a lot of the improvements already that the Corps of Enginers laid out for them to do. They have put in the new bridges and purchased the land they will need for widening the river, and they have options on land for roads, and they are all willing to do their part.

I want to say I have here—and I do not expect to put them in the record—but I have petitions from the village of Spring Valley and the surrounding farm areas, from 757 people, and I have petitions from Elmwood signed from 228 people. I would like to ask that just the printed part of one petition be made a part of the record.

Mr. DAVIS. Without objection, it is so ordered.

(The printed part of the petition is as follows:)

PETITION TO HOUSE PUBLIC WORKS COMMITEE ON EAU GALLE RIVER PROJECT

We the undersigned residents of Spring Valley, Wis., and surrouiding areas, do respectfully petition the Congress of the United States and the House Public Works Committee to approve and enact the necessary legislation for construction of a retarding dam and reservoir on the Eau Galle River to safeguard the

lives and property of citizens residing in communities adjacent to and traversed by the aforesaid river.

We shall not burden the committee with a recital of facts and history which have already been submitted to Congress and its committees in numerous documented studies explaining the need for the project. Congressman Lester Johnson will appear on May 2, 1956, before the House Public Works Committee's Subcommittee on Flood Control to testify in our behalf. We desire to personally emphasize that the threat of recurrence of the disastrous floods of 1942 is ever present in our lives during flood season.

Mr. GRAY. I would like to ask a question.

Mr. DAVIS. Mr. Gray.

Mr. GRAY. Mr. Johnson, I am interested to know what trouble if any your local people will have in raising their part of the funds.

Mr. JOHNSON. They will be able to go ahead and raise it. The county will help with some of it.

Mr. GRAY. It is five-hundred-and-some-odd-thousand dollars local participation.

Mr. JOHNSON. Yes. They intend to raise it. They are good thrifty Norwegian people up there.

Mr. GRAY. The reason why I ask is that I have a project in my congressional district with about the same amount involved and the people cannot raise the money, because we are taxed to the hilt.

Mr. JOHNSON. I talked to a drugigst up there, the mayor of the city, and he told me about the 1942 flood. He said he has steps about as high as from here up to the top of that picture to get into his drugstore. He said that night when it came up he had all he could do to get out without drowning because the river came all at once.

Mr. GRAY. What I was trying to determine is whether or not they intend to levy a tax, or make a donation, or how they will raise this money.

Mr. JOHNSON. They have done a lot already of the half million dollars that has to be spent, because they put in bridges. They figured whether the project went through or not the bridges are necessary. They have been doing it over the last 14½ years.

Mr. GRAY. I was interested to know. Misery likes company.

Mr. JOHNSON. These people have been waiting for a long time. You see, in 1941 they started a survey of the whole Chippewa River, and the Corps of Engineers found it was not practical. Then they started in and took the Eau Galle River, I believe, Mr. Brennan.

Mr. BRENNAN. That is right, sir.

Mr. JOHNSON. That is why it has taken so many years to get it back to the Congress. It has been 14½ years since it got started.

Mr. GRAY. Do they have a flood-control district up there? Do you have any kind of governing body to handle this?

Mr. JOHNSON. It will be the municipality—the city of Spring Valley—which will take care of that.

Mr. GRAY. You do not have a conservancy district?

Mr. JOHNSON. No. I imagine—and it is not a matter I have talked about with the local people—but with the watershed legislation that just went through Congress in the last week, with that kind of legislations there may be a chance on Mines Creek and Burghardt Creek there could be some work done up in those rivers under that watershed legislation.

Mr. THOMPSON. May I ask you one question? Mr. Johnson do you know of any opposition in the area to the proposal?

Mr. JOHNSON. I know of one man up there, But I think it is more that he does not like the Congressman than the project.

Mr. THOMPSON. You are very fortunate. That is all I have.

MISSISSIPPI RIVER AT WINONA, MINN.

Mr. DAVIS. We pass to the next project which is the Mississippi River at Winona, Minn., in compliance with House Document 324. First we will hear from Mr. Eugene Weber, of the Corps of Engineers.

STATEMENT OF EUGENE W. WEBER, CORPS OF ENGINEERS, UNITED STATES ARMY—Resumed

Mr. WEBER. Mr. Chairman, this report on the Mississippi River, at Winona, Minn., was authorized by a House Flood Control Committee resolution in 1944. Winona is a city of 26,000 on the Mississippi River in southeast Minnesota. It is situated in a wide valley between the high bluffs of the Mississippi River. For many years the town has been providing at its own expense protective works against the frequent flooding. They have expended about $544,000 over the years, mostly in the last 10 to 15 years.

The flood problem is one of flooding beginning at stages that are to be expected about every once every 3 to 4 years. More serious floods have occurred at about an average of every 10 years. The most serious flood was in 1952 which caused a damage of $2 million in this city of Winona and its environs. The average annual damages are estimated at $137,000.

The study of possible solution of this problem included the consideration of several different methods including diversions, channel deepening and reservoirs but the only solution that appeared practicable was to raise and strengthen the existing dikes and levees extending along this area shown in green on the map—about 6 miles of existing levees from the vicinity of Minnesota City to Huff and Second Streets in Winona and at the outlet of Lake Winona. The raising will be in the order of 2 to 4, and in a few cases 4½ feet. There will be a thousand feet of new levee at the foot of Lake Winona and 3,000 feet of new levee to enclose a small community outside of the existing levee. There will be two new pumping stations: one at the foot of the main levee system and one at the foot of Lake Winona, and there will be drainage ditches and sewers to collect the interior drainage behind the protected area.

The cost of this project is $1,658,000 at current prices, that is, as of January of this year. Of that the Federal cost will be $1,619,300 and the non-Federal cost will be $39,600. This low non-Federal cost is accounted for by the fact that local interests have already over the years acquired the rights-of-way for this entire project, which would normally come to a higher figure.

The benefit-cost ratio is 1.23. Comments were requested from the State of Minnesota and the Department of the Interior, both of whom have indicated that they favored it. Or, rather, the State indicated it favors the project highly and the Department of the Interior has no objection.

The city indicated a willingness to make the local contribution, and the Bureau of the Budget has reported it has no objection to the

submission of the report, but could make no commitment for appropriations at this time.

I believe those are the only features that need presentation, Mr. Chairman, unless there are questions.

Mr. DAVIS. That is a very splendid presentation. You are getting into Joe Brennan's class. You have a couple of good boys here. Are there any questions on my right?

Mr. ROGERS. What about maintenance. Whose responsibility will that be?

Mr. WEBER. The maintenance will be the responsibility of the local interests.

Mr. ROGERS. Is there land enhancement in this project?

Mr. WEBER. Yes, sir. There is land enhancement in a proportion which would call for a cash contribution under our normal procedures of about eight-tenths of 1 percent of the cost of the project. In view of the large local contribution there was an inclination not to request the local interests to make the cash contribution, but the final recommendations of the Chief of Engineers were to request the cash contribution, which amounts to just a few thousand dollars, in order to preserve that principle which we have been consistently following in our recommendations. So it does include a cash contribution of a small amount—$13,000.

Mr. ROGERS. In regard to your proposed flood-protection levee, shown by the letter A is that on the river flowing south?

Mr. WEBER. This lower one here is at the outlet of Lake Winona, and it is to prevent backwater into this low-lying area around Lake Winona, accompanied by a pumping station in order to pump the accumulation of interior water in this drainage channel leading up to this point.

Mr. ROGERS. Where is the flow of the Mississippi?

Mr. WEBER. The Mississippi flows in this direction—from west to east—in this location. The flooding will be from the Mississippi River and it will tend to come back into this low-lying area known as Lake Winona.

Mr. ROGERS. Thank you, Mr. Chairman.

Mr. MACK. What did you state was the benefit-cost ratio?

Mr. WEBER. 1.23.

Mr. BUSH. Did you make the statement that this project had been authorized earlier?

Mr. WEBER. No, sir. There is no authorized Federal project in this vicinity. These works that are there now and that would be strengthened are locally built works.

Mr. DAVIS. Are there any further questions? Thank you, sir. We are going to ask Mr. Anderson if he cares to make a statement.

STATEMENT OF HON. AUGUST H. ANDRESEN, MEMBER OF CONGRESS FROM MINNESOTA

Mr. ANDRESEN. Mr. Chairman and members of the committee, I want to thank you for giving me the privilege of appearing here. I do not have a prepared statement, but I wish to urge the committee to approve this project for legislative action in connection with the bill you are now considering. It is a necessary project, a worthy

project, and one where full cooperation will be found from all local sources.

Winona is a growing industrial city in the heart of a big farm area. It is located in a valley and is subject to floods from the Mississippi River. The local people have endeavored over a period of years to take care of their problem, but due to the large amount of water that comes down the Mississippi River they are not able to cope with it themselves. So it is my hope your committee will include this project in the bill you will shortly report to Congress. Thank you very much.

Mr. DAVIS. Thank you very, very much.

Now, Mr. McConnell, we would like to have you read this resolution. This resolution was prepared by our counsel, Mr. Tierney, after consultation with the committee appointed yesterday consisting of Mr. Dempsey, Mr. Smith, and Mr. Mack. The resolution speaks for itself so we will give careful attention to its reading.

Mr. MCCONNELL (reading):

RESOLUTION OF SUBCOMMITTEE ON FLOOD CONTROL, COMMITTEE OF PUBLIC WORKS

Whereas the survey report program of the Corps of Engineers has been given serious consideration by the Subcommittee on Flood Control of the Committee on Public Works; and

Whereas the subcommittee is deeply concerned about the large backlog which has resulted from the study of projects assigned to the engineers by the Congress and the relatively limited amount of funds which have been appropriated to carry on this work; and

Whereas the rate of survey investigation work permitted by appropriations for the last several years for the flood-control survey program has been sufficient to carry on only about 10 percent of the backlog; and

Whereas these surveys from the basis of project authorizations for important flood-control work designed to protect life and property, important industries, transportation centers and lines, as well as major food-producing areas; and

Whereas many of the pending survey studies should clearly be brought to culmination because of their obvious merit, some involving urgent remedial work in areas where there have been devastating and costly floods in recent years: Now, therefore, be it

Resolved, That the Subcommittee on Flood Control of the Committee on Public Works request the Committee on Appropriations to increase appropriations for investigations and studies involving flood-control projects so that not less than $2,500,000 may be made available to the Corps of Engineers for this work in fiscal year 1957.

This is signed by Clifford Davis, Russell V. Mack, John J. Dempsey and Frank E. Smith.

Mr. DAVIS. All of the members of the committee will sign it if it is approved. Let me ask General Itschner a question. General, are the facts and figures substantially correct in that resolution?

General ITSCHNER. Yes, sir. I would say they are correct.

Mr. DAVIS. Fine. What is the pleasure of the committee?

Mr. GRAY. I move the adoption.

Mr. MACK. I second the motion.

Mr. ROGERS. What was the amount allowed in the bill last year?

Mr. MACK. $2,050,000.

Mr. ROGERS. So this proposes about a half a million dollars increase?

Mr. MACK. $450,000.

Mr. DAVIS. And the Corps of Engineers say they can use this money most effectively and this committee has long felt the urgent need for additional money for planning and survey work.

Mr. SCUDDER. I would like to ask a question of General Itschner. This $2,500,000 would be all spent on flood-control surveys?

with the attendance. He has that magnetic personality that influ-

General ITSCHNER. Yes, sir. That amount of money could be spent on flood-control surveys alone.

Mr. SCUDDER. Thank you.

Mr. GRAY. I have one question. General Itschner, if this extra $450,000 requested in this resolution is allowed about how many projects do you think you would be able to start on?

Mr. DAVIS. That would be rather hard to answer.

Mr. GRAY. Well, surveys usually run from about $25,000 to $50,000. He could give a general idea of about how many.

General ITSCHNER. I would say very roughly, because it depends on the particular studies that would be chosen, but it would be somewhere in the vicinity of 18 to 25. We are very anxious to concentrate on these studies as much as we can in order to complete them as early as possible, rather than spread out too thinly and put too little on each study.

Mr. GRAY. Thank you.

Mr. DAVIS. The previous question has been called for and ordered. All those in favor of the adoption of the resolution let it be known by saying "Aye." Any opposition? It is unanimously carried, and we certainly hope it will be effective with the Appropriations Committee. Will the members please remain for a second until we sign this resolution? Let me express the appreciation of the Chair to the Corps of Engineers for the very effective presentations they made on these two projects we considered today. You can evaluate in the next day or two the question of whether we can add 1 or 2 more projects to our day's work.

I want to thank the members of this committee for their attendance and their prompt attendance, because it makes our work very effective when so many of us are here so promptly. I have said many, many times, and I declare again, that I believe this is the best subcommittee of the whole Committee on Public Works.

Mr. SMITH. That is because of the sterling qualities of the chairman.

Mr. GRAY. Mr. Chairman, I want to join with you in those remarks because I had an experience last week; I will not say what committee it was but I went before a committee to testify and it took 45 minutes to get a quorum. It was not a subcommittee but a full committee composed of over 30 members. So I think the Public Works Committee and their subcommittees are to be commended, because this other committee is not very far from here, and it is a very prominent committee. I am not criticizing, but I am proud of the fact that we have a good attendance.

Mr. DAVIS. I am certainly proud to join with you in anything you say about our entire committee. Our colleague Mr. Scudder has a visitor this morning observing our session.

Mr. SCUDDER. Mr. Chairman, I take pleasure in introducing to the members of the Public Works Committee one of my constituents, Mr. Douglas Campbell, from the city of Santa Rosa, Calif.

Mr. DAVIS. We are glad to have you here.

Mr. SCUDDER. I have to apologize for being a little late today. However, I am usually very prompt in attendance at the committee meetings and I do think the chairman has set a good example in being prompt in calling the meeting to order which has something to do

with the attendance. He has that magnetic personality that influences our promptness.

Mr. DAVIS. Thank you very much. Without objection, the committee stands adjourned until 10 a. m. tomorrow morning.

(Whereupon, at 10:50 a. m., the subcommittee adjourned until 10 a. m. the following day, Thursday, May 13, 1956.)

FLOOD CONTROL OMNIBUS BILL

THURSDAY, MAY 3, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met at 10 a. m. in the committee room of the Committee on Public Works, room 1304 House Office Building, Hon. Clifford Davis (subcommittee chairman) presiding.

Mr. DAVIS. The committee will be in order.

We only have an hour and we want to dispatch as much business as we possibly can.

BAD RIVER, WIS.

The first project is Bad River, Wis., House Document 165. We will hear from Mr. E. W. Weber, a representative of the Corps of Engineers.

STATEMENT OF EUGENE W. WEBER, CORPS OF ENGINEERS—Resumed

Mr. WEBER. Mr. Chairman, the report on the Bad River, Wis., project was authorized by the Flood Control Act of July 24, 1946, and by a Senate Committee on Commerce resolution of April 6, 1946.

The Bad River drains an area of 990 square miles and empties into Lake Superior 10 miles east of Ashland, Wis. There are no projects for flood control authorized by the Federal Government nor any non-Federal flood control works, but there is a flood problem in two towns, the town of Mellen, with a population of approximately 1,300, located 50 miles upstream in the headwaters of the basin; and the town of Odanah, an Indian settlement in an Indian reservation at the downstream end of the river near the shore of the lake. Odanah also has a population of about 1,300.

Damages occur in both of these towns from floods of about 3 to 4 years' frequency. The worst flood was in June 1946, when the damages amounted to about $224,000 in the upstream town of Mellen, and about $450,000 downstream at Odanah. There have been damaging floods 2 or 3 other times in the last 10 or 15 years, and the average annual damages amount to about $27,000 at Odanah and $23,000 at Mellen, the upstream town, a total of about $50,000 annually.

Possible plans for improvement of the situation at Mellen, the upstream town, were primarily to consider improvement of the channel through the town. It was proposed to widen, deepen, and straighten, and in some instances pave, 9,300 feet of channel running through the town, the paving to be in the most congested section.

This work would have an estimated Federal cost of about $390,000 and non-Federal cost for rights-of-way and utility changes of $10,000, a total of $400,000.

The benefit-cost ratio for this work is 1.57.

In Odanah consideration was given to similar plans, but the most feasible plan is to evacuate the flood area. All this area shown on the map is subject to flooding in Odanah, and this area outlined by the dashed lines is the settled area of the Indian reservation. There are 102 buildings in the area subject to frequent flooding, and moving them to high ground is the most economic plan.

Therefore, the proposed project is to move or rebuild these 102 buildings, of which 88 are residences, to this high ground, and to raise the school area within a small dike to protect nine school buildings.

The total estimated cost of that work would be $527,000 for the Federal Government and $5,600 for local interests to buy rights-of-way and to make the utility changes in the school area. In this instance the local interests include the Bureau of Indian Affairs which controls the Indian reservation.

In addition to the usual provisions that local interests provide the lands, easements, and rights-of-way, maintain the works and hold the United States free from damages, it is required that at Mellen the local interests regulate and prevent encroachments on the area needed for the new channel. And at Odanah it is required that the local interests provide regulations to prevent future construction and occupation in the evacuated area in the flood plain.

All the comments are favorable. The Bureau of the Budget has no objection but would make no commitment as to when any estimate of appropriation would be submitted for construction of the improvements if authorized by the Congress.

The Bureau of Indian Affairs is agreeable to the plan at Odanah.

Mr. DAVIS. What is the total cost of the improvements?

Mr. WEBER. $932,600 for the two locations.

Mr. DAVIS. Just under a million dollars.

Any questions on this side?

Mr. MACK. Is the benefit-cost ratio satisfactory?

Mr. WEBER. Yes, sir, 1.57, for Mellon and 1.48 for Odanah.

Mr. DAVIS. We have here our colleague, Mr. O'Konski. We would like to have you come around, Mr. O'Konski, and may I suggest, respectfully, that we will put your full statement in the record but would appreciate it if you would summarize your remarks at this time in the interest of time.

STATEMENT OF HON. ALVIN E. O'KONSKI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WISCONSIN

Mr. O'KONSKI. Mr. Chairman and members of the committee, it will take me just 1 minute. I just want to say that this is a recurring thing. We had our first flood in 1906, another in 1909, another in 1911, another in 1916, another in 1926, another one in 1941, another in 1944, and another in 1946. It is a recurring thing, and this project is badly needed. I would appreciate it very much if this committee would include this project in the omnibus flood-control bill.

I have here the city attorney who represents all the communities in this area, and the city attorney of the city of Mellen, who has a short statement of a minute or two he would like to make.

Mr. DAVIS. Any questions of Mr. O'Konski?

(The following statement was submitted by Mr. O'Konski for the record:)

STATEMENT BY HON. ALVIN E. O'KONSKI ON MELLEN AND ODANAH, WIS., FLOOD-CONTROL PROJECT

Mr. Chairman and members of committee, the Bad River, the Mauvaise Riviere of the early French explorers, was known to the Chippewas as the Mashkeg zibi, or Marsh River. The former name was applied by the French because of the large amount of suspended matter in the waters of its lower portions, which flowing as they do for many miles between banks of red clay, naturally carry a great deal of clayey material to Lake Superior. This characteristic is shared only by the streams entering Lake Superior along the Wisconsin shore as most tributaries emptying in Lake Superior are rapid streams flowing over rocky channels. The Indian name of Mashkeg zibi is used because this river enters Lake Superior through a large marshy area and is the only stream that enters the lake in Wisconsin through such an area.

DRAINAGE AREA

The Bad River Basin is situated in Ashland, Bayfield, Iron, and Sawyer Counties, Wis. This basin is fanshaped, and its tributary streams, containing many rapids, cascades, and falls, are short and swift so that the floodwaters discharged from them tend to pile up in the main valley. The watershed has a total width from east to west of about 56 miles while the maximum distance north and south is but 32 miles. The total drainage area at the mouth is 965 square miles.

SOURCE AND COURSE

The Bad River rises near the center of Morse Township in Galltree Lake in sec. 14, T. 44 N., R. 2 W., of fourth principal meridian, about 5 miles southeast of the city of Mellen, at an altitude of more than 1,500 feet above the sea. The river follows a circuitous course in passing through the villages of Morse, Cayuga, and Penokee, the city of Mellen, Copper Falls State Park, and the village of Odanah, and enters Lake Superior about 12 miles northeast of Ashland and 3 miles (airline distance) north of the village of Odanah.

TOPOGRAPHY AND GEOLOGY

The Bad River originates in a marshy terrain but within a few miles has a fall of 10 feet per mile. It sometimes flows in a deep narrow gorge 10 to 20 feet wide with sheer rock walls of pink granite. Near Penokee, the river valley forms the famous Penokee Gap in the Penokee Iron Ridge. In many places, the Bad River has gouged out its channel following along the strike of the Huronian rocks. The basin, then, of the Bad River is varied in its topographic features and in general is distinctly rolling to hilly with numerous rivers and gullies presenting an area conductive to rapid and excessive runoff.

There are few regions in North America of equal area which surpass the northern part of Wisconsin in geological interest both with respect to the magnitude of the formations involved and the unique character of one of its great rock systems. The region includes four great systems each unconformable with its predecessors besides which there is an extraordinary development of the Quartenary deposits. The four systems are: The Laurentian, Huronian, Keweenawan, and Lower Silurian. The greater part is made up of crystalline rocks of many different kinds. The northern limit of the Laurentian in the Bad River Basin is 25 miles from Lake Superior. Near Lake Superior, its rocks are almost wholly igneous and granite.

The Huronian system lying immediately against the Laurentian but very sharply defined from it, extends in a belt 1½ to 2½ miles wide from the Montreal River westward for 50 miles to Lake Nemakagon. This formation composed of limestone, schists, specular quartzites, and lean magnetic and specular iron ores, forms the Penokee Iron Range.

The Keweenawan system is peculiar to the Lake Superior Basin. It is distinctly; a stratified system made up largely of eruptive rocks in the form of great flows. It contains two kinds of gabbro and in the Bad River Basin has great development at the base of the system. The rock excavation which is recommended for the channel of the Bad River between the L. S. D. P. Co. dam and the Soo Line Bridge in Mellen, is composed of gabbro of the Keweenawan system. Granite is of restricted occurrence but is found penetrating the upper mica schists of the Huronian and the gabbro at the base of the Keweenawan. Just west of the Bad River between Penokee and Cayuga is the only place the granite is known in the basin.

Shales, sandstones, and conglomerates are also present, the shales being dark gray to black, and red sandy shale grading into standstone. Sandstones are chiefly red in color.

The Huronian series is in evidence at Penokee Gap, Ashland County, in the gorge of the Bad River where the white quartzite is visible on the left bank and the limestone on the right.

The lacustrine clays of the Quartenary underlie all the lower levels bordering the lake above which they rise to altitudes of 500 to 600 feet and are finally left, along the Soo Line Railway, in the Bad River Basin south of section 19–45–2. In this vicinity, clays are seen overlying an irregular surface of true glacial or boulder drift. The streams flowing through the clay area have cut deep, narrow, steep-sided ravines, thickly timbered and where land slips have occurred, the red clay is exposed. On the surface, the clay is thinly covered by a layer of vegetable mold. Absence of gravel of glacial drift is noticeable and boulders are rare and small. The entire basin is in the so-called Old Land area of northern Wisconsin. The formations are metamorphosed, folded, and tilted and in many places have a nearly vertical dip.

SOIL AND CULTURE

The character of the soil varies from the rich alluvial loam deposits along the river valley to sandy and gravelly soils often mixed with clay. In general, the soils are those naturally associated with and resulting from glaciation. Clay soils generally predominate in the northern part of the basin and in the coastal area along Lake Superior.

The basin is now covered with light to heavy stands of second-growth timber, principally coniferous but with most varieties of hardwoods represented, maple, elm, and poplar predominating. Use of the land for agricultural purposes is still limited to scattered tracts. Most of the drainage basin lies within the Chequamegon National Forest or the Bad River Indian Reservation except a narrow strip between the villages of Cayuga and Marengo. The whole region was originally densely wooded and formed a small part of the northwestern forest. In the early days, travel was difficult and principally by foot, because of the dense forest growth. The prevailing trees were of evergreen varieties. In the lowland north of the Copper Range, the prevailing growth was balsam, hemlock, spruce, and hickory, with some white cedar and occasional areas of pine or scattering pine trees.

Lumbering operations, extensive in years past, have now all but ceased but mining operations in iron and copper still survive. As recent as 1921, water-storage reservoirs were operated in the Bad River Basin above Odanah, the waters being released in spring and summer for log drives.

CLIMATE

The Bad River Basin receives an average annual rainfall of 28.6 inches, while the State average is 30.57. Snowfall ranges between 55 and 60 inches as compared with a State average of 30 inches. The mean January temperature is 9.8° F. while that for July is 68.6° F. The maximum temperature recorded thus far is 105° F. and the minimum, 33° F.

The growing season is 125 days in duration. May 21 is the average date of the latest killing frost in the spring, while the first killing frost in the fall is most likely to occur on September 23.

The mean annual evaporation from the lakes in the basin is 25 inches while the summer evaporation (April to October, inclusive) averages 20 inches. The rainfall during the summer season, April to October, is 20.2 inches so that rainfall and evaporation balance each other in the average season and, generally speaking, there is an excess of rainfall over evaporation for the year of 3 inches.

AVAILABLE WEATHER RECORDS

There is a decided lack of records of rainfall and streamflow in the basin. At present there is a cooperative weather bureau station equipped with a standard rain gage at Mellen, otherwise the official weather stations are outside of the Bad River Basin proper. The Hydrologic Branch of the United States Weather Bureau maintains automatic rain gages at Ashland (near), Rest Lake, and Park Falls. Records of precipitation at Ashland are available from 1900 to date, at Mellen from 1931 to date. From 1899 to 1909, a station was maintained at Butternut, Ashland County.

AVAILABLE STREAMFLOW RECORDS

During the period July 31, 1914, to November 11, 1922, the United States Geological Survey, Water Resources Branch, maintained an automatic recorder station near Odanah, 12 miles above the mouth of the Bad River, and 8 miles below the junction of the Bad and Potato Rivers in section 25, T.47 N., R. 3 W., of the fourth principal meridian.

From August 30, 1928, to January 8, 1932, the United States Corps of Engineers maintained a gaging station in section 23, T. 47 N., R. 3 W. of 4th principal meridian, on James Smart's farm.

GREAT STORMS

A recent publication containing records of the great storms of the United States entitled "Great Storms in the United States Depth-Area-Duration Data, Corps of Engineers of the United States Army, 1945" gives data on two severe storms that have affected the Bad River Basin in the past.

BEAULIEAU, MINN., AND IRONWOOD, MICH., STORM

This storm occurred July 18 to 23, 1909, and centered at Beaulieau, Minn., and Ironwood, Mich. The duration of the storm was 108 hours. Precipitation was recorded as follows: Ironwood, Mich., 13.21 inches; Beaulieau, Minn., 12.07 inches; Duluth, Minn., 8.28 inches; Sandy Lake, Minn., 6.56 iniches; Iron River, Mich., 6.12 inches. On the isohyetal map of this storm, the 10-inch isohyetal line passes through the Bad River Basin just east of Ashland. The storm covered an area of 50,000 square miles to an average depth of 2 inch, 10 square miles of this area had rainfall averaging 11½ inches.

STORM OF AUGUST 28–31, 1941

This storm had its center at Hayward, and Moose Lake, Wis., and had a duration of 78 hours. Rainfall began at 6 a. m. on August 28, and ended at 12 noon on August 31. This storm covered an area of 60,000 square miles. During the storm period, precipitation over this area averaged 4.7 inches. In 78 hours precipitation averaged 12 inches over an area of 1,000 square miles.

MELLEN STORM OF 1946

The storm of June 23–25, 1946, was probably part of the storm which struck Duluth and Perham, Minn. Near Duluth, the storm occurred on June 24 and centered over Island Lake Reservoir, where a precipitation of 7.10 inches was recorded. Precipitation over the upper part of the Lester River (Minn.) was between 5 and 6 inches, and over the lower part of this river, the precipitation varied from 2 to 5 inches; all within 8 hours. At Perham, Minn., the storm struck between 6 and 10 a. m., on June 26. Precipitation at Perham was 6.77 inches in 21 hours.

The isohyetal map (fig. 5) shows the storm centering at Mellen, Wis. Lines of equal rainfall are indicated and the total rainfall for the 3-day period is shown for each of the weather stations used for the map, in table 8 in the appendix. Maximum precipitation at Mellen for the 3 days was 12.33 inches of which 11.74 inches occurred within 12 hours. This map indicates that there was between 8 and 12 inches of rainfall over the Bad River Basin above Mellen. The area of the Bad River Basin above Mellen being fan-shaped, the numerous creeks contributed their waters quickly and, therefore, the time of concentration was short. From the best available data, it appears that the maximum peak flow at the

Soo Long Bridge over Bad River at Mellen approximated 10,000 cubic feet per second.

FLOODS

The Bad River has had flood flows in many years of its history but unfortunately such flow records as are available in the basin have been obtained in years of only moderate stages. In order to obtain some idea of the magnitude of the flood events which have occurred, files of the Mellen Weekly and the Mellen Weekly Record, published at Mellen, have been searched for accounts of major floods. Those accounts were augmented by the recollection of local residents and comparative stages of water in flood years have, in some instances, resulted. In the following paragraphs, the available information for each flood event about which some information was obtained has been summarized, using all information that could be obtained. An attempt has been made to piece together the fragments in order to evaluate the relative importance of the various flood events.

1906

In this year, a dam in the same location as the present Lake Superior District Power Co. dam failed during high water by the breaching of the dike on the left bank.

The Mellen Weekly of Thursday, April 26, 1906, states: "After a week of riot, the river returned to normal Sunday (April 22) and now is at its regular height. A channel 8 feet deep was washed alongside of the abutments of the bridge at the foot of Drake's Hill (Division Street). The bridge at Ruggles went out during high water, as did the highway approaches to two others near the mill." This is the old mill which was located below site of present power dam. The structures themselves were not damaged.

1909

Thursday, May 20, 1909, the Mellen Weekly says: "Foster Latimer Lumber Co. closed all week on account of high water in Bad River. There was no other damage at Mellen. At Odanah, the opera house is 6 feet under water, and the wagon bridge is also under water."

Under date of July 22, 1909, the Mellen Weekly says: "A severe storm on Tuesday was the worst for many years. The water rose nearly up to the windows on the Annie Freve's residence and was 4 feet deep along the river near Division Street between Main Street and Drake's Hill. There was severe damage to roads. Water rose to a point about 6 inches over the deck on the Division Street Bridge (high water, July 1909, 1,230.0)."

1911: Old settlers in Mellen recall high water in this year.

1916: Old settlers in Mellen recall high water in this year.

1926: Old settlers in Mellen recall high water in this year.

1941

The headline in the Mellen Weekly under date of Thursday, September 4, 1941, is "Mellen flood damage $50,000" and then continues substantially as follows: (Not verbatim.) "A 5-inch rain between Saturday (August 30) at 6 a. m. and Sunday (August 31) at 6 a. m. put the Bad River out of its banks at noon on Saturday, August 30, and by 11 p. m. had attained a stage 12 feet above normal. Waters discharged from Devil's and Montreal Creeks aggravated the situation. One-third of the city is under water. The substation of the Lake Superior District Power Co. was struck by lightning. There was no loss of life. Several days of previous rain coupled with the heavy downpour on Friday night, swelled the river so that by Saturday noon (August 30), the river was up to the low steel of all the bridges. White City was evacuated. By 4 p. m., Thomas Avenue, Main Street, Tyler Street, and Copper Falls Bridges were under water. Division Street Bridge was the last one to go under at 10 p. m. At the dam, one large gate had been open for several days prior to the flood. Early Saturday morning, the other gates were opened wide, and at 5:45 p. m. on Saturday, the north wing of the dam began to wash away. Sandbags were of no avail because of the swift current. Before 9 o'clock, all hope of saving the wing of the dam was gone. Homes were inundated in White Row, 4 houses over near Division Street, and 6 houses, the Alvin Stever home and 5 others on the east end were flooded. Four houses on Main Street were damaged. On Thomas Avenue, the John Petras home was flooded and damaged by driftwood. The sidwalks at the high school were washed

away. The floodwaters receded slowly. By 6 a. m. Sunday (August 31), water had receded 2 feet below the flood crest. On Tuesday (September 2) all bridges and dikes were out of water. Twenty-seven sightseers were marooned in Copper Falls Park from noon on Saturday until Monday. The Red Cross was on the scene. At Copper Falls State Park, the swimming pool was gone and two bridges were destroyed. The damage in the park was estimated at $40,000. In the vicinity of the town of Morse, damage to higways is estimated at $12,000." The highest stage reached was to the level of lower bar of the railing on the upstream side of the Main Street Bride (1,230.85).

1944

Information as to this flood was obtained from the Mellen Weekly Record, dated Thursday, June 8, 1944. Estimated damage in Mellen was $10,000. A cloudburst on Sunday (June 4) did extensive damage to gardens, walks, and fuel. Goods and stocks, in basements on Division Street were damaged. Flood stage was reached at 1 a. m. Water was 1 foot deep on first floor of John Sieraski home just south of Main Street Bridge. The highest level, occurring at 10 a. m., was several inches over the east end of Division Street and rising to the first floor of several houses there (probable stage, 1,230).

All day Monday, June 5, water was flowing over Forest Park Bridge, Main Street, White Row, and roads and bridges just west of Soo Line tracks on way to Copper Falls. By late Tuesday night, the river had dropped to normal. Sand and silt did damage to homes. There was also damage at Glidden and Odanah.

1946

In November 1946, a detailed survey of the Bad River Channel was made by the engineers. A detailed study of the storm of June 23–25, 1946, and a field investigation to determine flood stages was also made during which many watermarks on buildings, bridges, and trees near the dam and elsewhere were found and their elevation ascertained.

Investigations and surveys show that the maximum level attained in the pool (headwater) above the power company's dam in Mellen in June 1946, was 1,240.5. The maximum water level below the dam (tailwater) as determined from watermarks on trees and the debris line along the banks was 1,237.8. Watermarks on trees along the left bank below Thomas Avenue indicated stages from 1,234 to 1,237. A watermark on the storm window of the John Sieraski home on Main Street showed the maximum stage reached at that point to be 1,235.9, while at the Standard Oil Station, watermarks on the building indicated a stage of 1,235.6. Near Division Street, a watermark on the inside of the wall of the tavern showed a stage of 1,234.7. On the upstream side of the Soo Line Railroad bridge watermarks indicated stages from 1,232.1 to 1,234.6. Below the Soo Line bridge, watermarks on the bridge itself and on trees just below showed stages from 1,227.45 to 1,228.45. The main current during the high stage followed the artificial cutoff channel nearest the left bank although the entire valley was overflowed. Inflow from Montreal and Devil's Creeks was heavy so that at county road K, a maximum water level of 1,225.5 was reached, confirmed by watermarks at the Lawrence Jaeger home on the left bank below the road. Here a mark at 1,224.3 was found on the basement window sill while on nearby trees, distinct marks at 1,225.6 were observed. At the Soo Line Railroad crossing at county road K, the water attained a depth of 1.9 feet over the crossing. Mr. Jaeger was able to paddle around his entire house in a canoe, and a neighbor crossed the Soo Line Railroad tracks in a row boat propelled by an outboard motor. According to Lawrence Jaeger, there was about 4½ feet of water in his basement due to seepage. The railroad was tied up for 2 weeks due to track washouts north of Mellen, but the tracks at county road K were inundated for but 1 day. The highest stage was at 9 a. m., on Monday, June 24. Mr. Jaeger estimated that the maximum stage of the 1941 flood at county road K was 4.6 feet lower than the 1946. The Jaeger house is 20 to 25 years old and no water from the river had ever been known to get into the basement previous to June 1946.

The chronology of events appears to have been about as follows according to the account in the Mellen Weekly Record under date of June 27, 1946: "The Bad River together with Devil's and Montreal Creeks after an 8-inch rain starting Sunday, June 23, flooded the town of Mellen and vicinity. In Mellen, 5 homes and

1 business establishment were wrecked. 175 persons were homeless." The flood receded by June 27 and permitted the work of rehabilitation to proceed.

The first general alarm was sounded at 2 a. m., on June 24. By 6 a m. the river was over its banks through the city. The driving rain continued throughout this time. The Penokee Veneer Co., helped in rescue work with men and boats. By 9:30 a. m., the north dike of the dam had failed releasing a 4-foot head of water. Soon after, homes were swept away. At 3:30 p. m., the last family on Division Street was rescued. There was no loss of life. The National Red Cross, through the local unit, assisted in rehabilitation of distressed families.

The Alvin Stever home, a 2-story building, on Division Street was swept off its foundations and lodged against the Soo Line Railroad bridge. Two automobiles were also washed downstream. Jack Granberg's ice cream parlor was damaged and also the Schroeder Dairy.

On Devil's Creek, homes were surrounded by water up to several feet over the first floor. Ten homes in "White Row" (Tyler Street) were damaged. Train service on the Soo Line Railroad was halted after Sunday. Bus service out of Mellon was discontinued after Sunday night because of bad road conditions.

It was reported that there were logs stored in the pond above L. S. D. P. Co.'s Mellen dam No. 2 when the storm struck and that the boom broke when the left dike failed and some of these logs were carried downstream by the current.

The following paragraphs are excerpts from publications by the United States Department of Commerce, Weather Bureau, entitled "Climatological Data—Wisconsin Section" under the heading "General Summary" for month and year indicated (italic added):

June 1944

"From the 29th to 31st, excessive to torrential rains fell over much of the northern division with greatest intensity in Sawyer, Price, and Ashland Counties; 10.52 inches of rain fell in 24 hours at Hayward on the 29-30th. This is exceeded only by the all-time State record of 11.25 inches at Merrill on July 23–24, 1912. "Excessive rains caused severe flooding at the end of the month in the Chippewa and upper Wisconsin Rivers and headwater tributaries, *and in smaller streams flowing into Lake Superior. Extensive damage was done to highways and railroads, and many bridges were washed out prostrating traffic, particularly from* Rusk, *Sawyer, and Bayfield Counties* to Marathon and Langlade Counties. At least 1 person was drowned, and some 1,600 families were forced to leave their homes. A wing of the Spirit River storage dam near Tomahawk broke, releasing water from the large reservoir into the Wisconsin River with resulting great damage to a paper mill, machinery and stocks of paper at Brokaw. *A storage dam above Mellen gave way flooding portions of that city and the Bad River Valley below, and forcing some 1,200 Indians to vacate their homes in Odanah.*"

June 1944

"Rainfall averaged 6.04 inches, or 146 percent of the normal amount. *The month was the wettest since September 1942 and the eighth wettest June of record.* Amounts exceeded 8 inches at several extreme northwestern, central and extreme southwestern stations, and were less than 4 inches at several extreme southeastern stations; 9 northwestern, 4 central and 2 extreme southwestern stations had excessive rainfall of over 2.500 inches in 24 hours. Sparta reported the greatest intensity, 4.18 inches from 4:25 p. m. to 8 p. m. of the 15th. *Excessive rains in the extreme north caused the Bad and White Rivers and Devils Creek to overflow on the 5th. Half of Odanah was flooded 2 to 6 feet deep and some 30 families were evacuated at Mellen.*"

June 1946

"Rainfall averaged 6.43 inches, or 153 percent of the normal amount. It was *the wettest month since September 1941,* and the *fifth wettest June of record. Amounts exceeded 10 inches at 12 northern and 1 central station,* and were less than 4 inches at many southern and extreme east-central stations. *The monthly rainfall of 15.95 inches at Mellen is the second greatest of record for the State, being exceeded only by 16.20 at Medford in June 1905.* One-third of the reporting stations had excessive rainfall exceeding 2.50 inches in 24 hours, mainly on the 23d to 24th. *A torrential rainfall of 11.72 inches at Mellen on the 24th set a new alltime 24-hour rainfall record for Wisconsin. Severe flash floods followed on the Bad and White Rivers and smaller streams emptying into Chequamegon Bay.*

A dam above Mellen gave way. A number of homes were swept away or demolished in Mellen and Ashland. All of Odanah was inundated and the residents evacuated. One person was killed when a bridge collapsed. *There was much damage to highways and bridges.* Preliminary estimates indicate total damage of near $3 million. Traces of snow fell at three extreme northeastern stations on the 1st."

Floods always result in losses—tangible or intangible—both, however, are real. Tangible losses can be estimated but intangible losses, such as the interruption of utility services—heat, power, light, water, and sewage—disruption of transportation, the distress and mental anguish suffered by those whose homes may have been destroyed, and of course the worst of all, loss of life, can never be evaluated. However, property can be protected from floods through modern engineering practices, and it is feasible to do so only when benefits exceed the cost. The cost of prevention is high but the losses sustained are higher.

STATEMENT OF BASIL KENNEDY, CITY ATTORNEY, MELLEN, WIS.

Mr. KENNEDY. Mr. Chairman and members of the committee, I have been sent here by the city of Mellen and the Indian council to assure you of the imperative necessity for this project because of the constant damage to our community and to give you assurance that all easements and rights-of-way will be furnished to the satisfaction of this committee.

I appreciate the opportunity to indicate the zeal of our area for this project and its imperative necessity.

I thank you.

I have some pictures here that show the nature of the damage.

Mr. DAVIS. May we have these pictures, or do you want them returned?

Mr. KENNEDY. You may keep them.

MILK RIVER, MONT.

Mr. DAVIS. We will pass next to Milk River, Mont., Senate Document 70.

We will hear from Col. R. Dalrymple, representing the Corps of Engineers in the presentation of this matter.

STATEMENT OF COL. R. DALRYMPLE, CORPS OF ENGINEERS

Colonel DALRYMPLE. Mr. Chairman, the report under review is contained in Senate Document No. 103 of the 78th Congress, 1st session. The review was authorized by a resolution of the Committee on Public Works of the United States Senate adopted March 9, 1948, and the report is printed in Senate Document No. 70 of the 84th Congress, 1st session.

The problem here involved is flood protection for Glasgow, Mont., located on Milk River, 67 miles above its confluence with the Missouri River in northeastern Montana. The city has a population of approximately 3,800.

The existing project is a Federal levee project which protects Glasgow on the west and south from floods originating on Milk River and Cherry Creek. This project was constructed by the Corps of Engineers in 1938.

The current problem is that of taking care of flooding at Glasgow caused by runoff from the hills and benchlands to the north which drains directly into the city by way of coulees.

The solution proposed here is the construction of an intercepting channel running across the mouths of these coulees and emptying into Cherry Creek, northwest of the city.

The floodwaters are a serious menace because the rapid runoff from snowmelt and heavy rains due to the steep slopes of the coulees cause heavy and rapid inundation in the northern part of the city.

The solution proposed is estimated to cost $295,800, of which $74,400 is Federal participation and $221,400 is non-Federal participation. The local interests are required to furnish the usual A B C's plus a contribution in cash of 67 percent of the actual cost of construction.

The benefit-cost ratio, based on January 1956 price levels, is 1.37 to 1.

There were no objections from Federal and State agencies involved at the time of the submission of this report. However, the Director of the Bureau of the Budget commented that in view of the low overall benefit-cost ratio of 1.08 at the time of the report, further consideration should be given to the question of whether there is adequate justification for Federal participation in the cost of the proposed improvement. A reevaluation in January 1956 based on normal growth and residential developments which were not known at the time of the report resulted in the very favorable benefit-cost ratio of 1.37.

Last year Glasgow constructed a 30-inch storm-sewer system to partially alleviate the flood problem.

It is now understood that local interests do not want to participate in this project at this time.

Mr. DAVIS. If they do not want to participate, what change does that make?

Colonel DALRYMPLE. That means at the present time they have partially alleviated their interior drainage problem by the construction of this sewer-drainage system, and they have indicated they do not at this time want to participate.

Mr. DAVIS. Would that affect the overall project at all?

Colonel DALRYMPLE. Yes, sir; it will have some effect on the overall project. If this project is authorized and funds are appropriated for its planning and construction, it would be necessary for us at that time, during our planning phase, to reevaluate the economics and engineering feasibility of the project.

Mr. DAVIS. Would you recommend that this committee authorize the project?

Colonel DALRYMPLE. We would have to ascertain at the time planning funds are made available what the economics and feasibility of the project would be.

(Insert of Mr. Fjare follows.)

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D. C., May 3, 1956.

Hon. CHARLES A. BUCKLEY,
Chairman, Committee on Public Works,
House of Representatives, Washington, D. C.

DEAR CHAIRMAN BUCKLEY: I understand that your committee will consider a report from the Chief of Engineers, Department of the Army, in connection with a flood-control project in the vicinity of Glasgow, Mont.

The information with respect to this project is in part set out in Senate Document No. 70 of the 84th Congress. The subject of the report is Milk River, Glasgow, Mont.

It has been indicated to me that the local people in Glasgow are not as concerned with this problem now as they were a few years ago. Naturally condi-

tions in the next few years might be such as to stimulate their interest again, and I think that is an important factor for the committee and myself to consider. It is therefore my recommendation that your committee give favorable consideration to the authorization of this project. This will protect the interests of the city of Glasgow in the event the need for the project increases in the next few years.

Yours very truly,

ORVIN B. FJARE.

Mr. DAVIS. If there is no objection, we will consider this project not in readiness, and we will just pass it and go to the next one.

TOMBIGBEE RIVER, MISS. AND ALA.

We take up next the Tombigbee River, Miss. and Ala., House Document 167.

We will hear first from Mr. Joseph Brennan, representing the Corps of Engineers.

STATEMENT OF JOSEPH R. BRENNAN, CORPS OF ENGINEERS—Resumed

Mr. BRENNAN. Mr. Chairman and members of the committee, this is a flood-control and drainage project for Tombigbee River in Mississippi and Alabama. The report on the project was authorized by a number of committee resolutions between 1939 and 1946. It is printed in House Document 167 of the 84th Congress, 1st session, which was submitted to the Congress on May 18, 1955.

The area is located in northeast Mississippi and northwest Alabama. Tombigbee River is formed by the confluence of the East and West Forks in Monroe County, Miss., flows southeasterly 207 miles to its junction with the Warrior River near Demopolis, Ala., thence southerly to join the Alabama River and form the Mobile River in southwestern Alabama.

The area is primarily agricultural. The two principal towns are Columbus, with a population of approximately 17,000, and Aberdeen, with a population of about 6,000.

There is an existing project for flood control and drainage which was authorized by the 1936 Flood Control Act and modified by the 1938 and 1941 Flood Control Acts. It consists of clearing and snagging the most restricted parts of the main stream and tributaries in various locations throughout the basin. It is a relatively small project, with a total cost of about $285,000 of which half was spent prior to 1940. No work has been done since 1940. There had been some WPA word done previously.

The floods are characteristic of that section of the country in that they are relatively frequent. The number of floods per year range from 2 to 8 and there have been even more extreme frequencies in some of the tributaries. The maximum flood at Aberdeen and in the upper reach of the Tombigbee River occurred in March 1955. The total damage caused by that flood in that area was $2,5 million. Over 300,000 acres were flooded, and 45 persons and more than 1,100 homes were affected by the flood.

We have computed the average annual damage, based on the history of floods, close to $2 million a year. Most of the damage, in fact about

90 percent of it, is agricultural damage, and the remaining 10 percent is in the urban areas, particularly in Columbus and Aberdeen.

The planned improvement comprises clearing growth from within 20 feet of the top of banks; clearing the channels of snags, debris, and drift jams; and excavating channel cutoffs and enlargements. There is no work proposed on the main stream of the Tombigbee. The principal improvements would be on Noxubee River, Sipsey River, Tibbee River, Luxapalila Creek, Buttahatchie River, and a number of small headwater tributaries. Those improvements are indicated in green on this map.

The total Federal cost is $14,445,400, and non-Federal cost $7,427,800, making a total of $21,873,200 on the basis of January 1956 prices.

The non-Federal contribution is made up of $1,089,000 for lands bridge alterations, and the other usual provisions of local cooperation, and $6,338,000 as a cash contribution because of land enhancement benefits.

The annual charges are $1,096,200. The annual benefits are $759,000 for the prevention of flood damage, and $1,073,000 from the increased use of land and change to higher land use, making a total of $1,832,000 in annual benefits.

The benefit-cost ratio, based on these costs and benefits, as of January 1956, is 1.67.

The report was submitted to the States and to the Federal agencies, and there was no objections except from the Department of Agriculture, who stated they could not concur in the plan until a complete watershed program can be recommended for the area.

The Bureau of the Budget, in commenting, said that if the project was authorized the Corps of Engineers should work with the Department of Agriculture in coordinating planning and construction so that the improvement would fit into any upstream improvements which the Department of Agriculture might have planned.

That completes the presentation, Mr. Chairman.

Mr. DAVIS. Any questions?

Mr. SMITH. Before Mr. Brennan concludes here I would like to ask him something about this cash contribution proposal here. There have been some land enhancements in some of the other projects we have considered so far, have there not?

Mr. BRENNAN. Not so far during these hearings.

Mr. SMITH. There have been no land enhancements in any of the other projects?

Mr. BRENNAN. I will correct that, sir. On the projects considered since Tuesday of this week there has been one project which had land enhancement, and I would like to ask Mr. Weber to comment on that since he made the presentation.

Mr. SMITH. The point I wanted to ask about this was, there will be some enhancement in all the areas where there is flood control. It may not come under your definition of land enhancement, but yesterday we considered a project in Minnesota, and certainly the property there will be more secure if the project is constructed.

Mr. BRENNAN. I would like to explain why there is no land enhancement contribution in the Eau Galle River project considered yesterday and why there is in the Tombigbee River project.

Mr. SMITH. That is what I want to get at, why it costs 29 percent in cash contribution on the project here.

Mr. BRENNAN. The protection of any property from floods will, as you have pointed out, give rise to the restoration of values which have been depreciated because of the flood problem. The value of lands exposed to floods normally goes down because of the fact that they are exposed to floods. The restoration of that depreciated value is measured by the amount of flood damage that is prevented.

In addition to the restoration of depreciated value, there are certain cases where lands which are being protected, now have greater value, over and above the restoration of any depreciation, and it is that value, over and above the restoration of depreciation, that we consider land enhancement and for which we require a 50 percent contribution.

Mr. SMITH. How far back do you go?

Mr. BRENNAN. Generally, the customary use of the land during its flood history is taken into account, and we go back as far as possible to determine whether the land was originally of high value and was then lowered in value because of floods, or whether originally it did not have a high value because of the flood problem but, being protected, now enjoys a substantial increase over and above the natural conditions.

Mr. SMITH. I do not know the exact location of some of the land involved here, but I know it is all in a general area which for many generations, a hundred years or more, has been high value farmland, and the question in my mind is, of course it will be of greater value if this improvement is made, just like everything protected from floods, but the question occurs to me whether you took into consideration that this land depreciated in value because of its exposure to floods?

Mr. BRENNAN. Perhaps I can answer best by citing how we go about the determination. Our engineers contact the farmers and local residents and find out what the farming practices are, for two purposes: First, to determine the probable damages in the past to crops such as those which the owners are now growing; second, after having determined that, they determine whether or not, if flood protection were provided, the farmers would make a change in land use from low-value to high-value crops. If it appears the land would change in use, it is that increase we consider as enhancement benefits.

Mr. ROGERS. How do you determine land enhancement in a city, like the Winona project? It was stated yesterday there was not much land enhancement, but certainly they could use buildings in which they would not otherwise use if they did have the protection. It looks like the only time there is land enhancement is when farming is involved.

Mr. BRENNAN. A good instance of urban enhancement is the project for the city of St. Louis authorized in 1954 when there was land enhancement because of the protection of potential industrial property which is now useless.

Mr. SMITH. What was the percent of land enhancement in the St. Louis project?

Mr. BRENNAN. It was less than 10 percent.

Mr. SMITH. It was relatively modest compared to 29 percent?

Mr. BRENNAN. Yes, sir. The reason there is no land enhancement in the Eau Galle project is that all the property is developed. The

reason it is all developed is that there is no other place to develop. So, in spite of the flood hazard, people have used all available land and taken the risk of floods.

Mr. ROGERS. But it did not enhance the value of their property to protect it?

Mr. BRENNAN. Yes, sir, it did. As I mentioned earlier, there are two elements involved, one is restoration of depreciated value, which is in a sense an enhancement, but one we consider as a Federal responsibility. The other arises when flood control causes an increased value to accrue over and above the restoration of depreciated value, and it is that increase we consider to be an enhancement requiring a local contribution. If there are two areas involved, one developed industrially because it is less subject to floods and the other vacant because of extreme exposure to a flood menace, then the vacant property which can be put to higher use after protection enjoys a land enhancement benefit for which the owner or local interests would pay 50 percent.

Mr. ROGERS. But you do not consider that the adjoining property has been enhanced?

Mr. BRENNAN. It has been enhanced in the broad sense of the word because of its flood depreciated value being restored.

Mr. ROGERS. It looks like it is only agricultural land that gets enhanced. I think your urban property increases in value too.

Mr. BRENNAN. We apply the same rules, sir, whether it is agricultural or urban land.

Mr. SMITH. You mentioned the flood of March 1955 in this area. That was a flood of more than $2 million damages.

Mr. BRENNAN. Yes, sir.

Mr. SMITH. It was also such a quick flood that it endangered human life to a great extent.

Mr. BRENNAN. There was a danger to human life in Columbus and to a lesser extent in Aberdeen.

Mr. SMITH. I recall there were several very narrow escapes by people who just could not get out in time. I do not recall that there were actual losses of life.

Mr. BRENNAN. That is true, sir, we made a reconnaissance in detail after that flood. It is true there was no loss of life but that was a fortuitous circumstance.

May I say, Mr. Weber has informed me that the local contribution in the Chevreuil Bayou project is 29 percent.

Mr. BECKER. Mr. Chairman.

Mr. DAVIS. Mr. Becker.

Mr. BECKER. I believe you said the only work so far was snagging of the river?

Mr. BRENNAN. And clearing.

Mr. BECKER. What is snagging?

Mr. BRENNAN. I am sorry, sir, I should have explained that. That is the removal of debris in the river, trees and logs particularly, that lie along the bank and restrict the floodwaters.

Mr. BECKER. You said the total cost was approximately $21 million.

Mr. BRENNAN. Yes, sir $21,783,000.

Mr. BECKER. What was the local contribution?

Mr. BRENNAN. The total local contribution including lands, is $7,428,000.

pathetic because he too had heard of the flood that morning via radio.

Mr. BECKER. And the Federal contribution is the other $14 million?

Mr. BRENNAN. Yes, sir $14,445,000.

Mr. MACK. Did you say the Department of Agriculture is now engaged in flood-protective works in the upper reaches of this valley?

Mr. BRENNAN. No, sir. The Department of Agriculture stated that until a complete program for the watershed was designed and planned, the Corps of Engineers should not go ahead with its improvements.

Mr. MACK. Do you know if the Department of Agriculture has taken any steps toward making such a survey?

Mr. BRENNAN. I do not know if the Tombigbee is one of the areas where such a survey has been made.

Mr. DAVIS. That is in the conversation stage, I would imagine, but I call to the attention of the committee that I have never seen a worse set of pictures reflecting damages, and it occurs to the Chair we would be making a serious mistake to permit a recurrence of this. Does it happen almost annually?

Mr. BRENNAN. Yes, sir. The most frequent ones may happen as many as several times a year. The extremely damaging floods, such as the flood of March 1955, have a rarer frequency.

Mr. BECKER. Why has not something been done about it before?

Mr. ABERNETHY. I will speak to that.

Mr. DAVIS. We will hear from our colleague, Mr. Abernethy, who is certainly familiar with the situation.

STATEMENT OF HON. THOMAS G. ABERNETHY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MISSISSIPPI

Mr. ABERNETHY. Thank you, Mr. Chairman.

First I want to express my appreciation for this hearing. I have been in this House now for 14 years, and in answer to the gentleman's question when he inquired why we had been so long getting here, I do not know. I would like to know myself. I am not directing any criticism at anyone, but so far as I am personally concerned this particular area did not come within the congressional district that I represent until 4 years ago.

Mr. Chairman, my testimony will be entirely extemporaneous.

Mr. Brennan has located the area involved and indicated it to you on the map. This watershed has become popularly known as the inland waterway about which you have heard so much. I would not want the members of this committee to associate the two projects in any way or form. Personally I feel that the vigorous efforts should have been directed toward flood control primarily, and secondarily on behalf of the waterway. I am here in the interest of flood control, in getting water off some people who have suffered a good long time.

It is true this project has been a long time getting here. It goes back to 1939 when resolutions were introduced in this committee and elsewhere. As a result, the project got as far as the Bureau of the Budget in 1954. At that time I contacted the Bureau of the Budget unsuccessfully. When the flood of March 1955 was inflicted upon us, it was blared forth on the radio early one morning when I was coming to my office and the press was also full of the bad news. I called the Bureau of the Budget and talked to a gentlemen who was quite sym-

pathetic because he too had heard of the flood that morning via radio. He did not know of the report being in the Bureau. I told him it had been there quite some time, that I would appreciate it if they would pull the file and see if they could not expedite this matter. They very graciously complied. Sometime last year it was approved by the Bureau and submitted subsequently to this committee.

The history of floods in Tombigbee Valley is long. The floods are violent. They are damaging. And while I do not personally question the amount of damages inflicted in 1955 as has been stated to you, I do not have the figures before me, but I do not see how they could possibly be confined to $2 million. The flood waters spread into many counties. They spread to Columbus, a city of 17,000 people, and I think some 300 houses in Columbus were affected. They spread to Aberdeen, and smaller communities of that section.

This section is completely agricultural. The largest city in the area, as I have said, is Columbus, with a population of about 17,000. The total population in that area is 594,000, almost 600,000. The urban population is 127,000, the farm rural population is 319,000, and the nonfarm rural population is 146,000; 73 percent of the area is in active agricultural use and has been since time immemorial. The income from that agricultural land in 1949 was approximately $74,781,000. That means, when you divide the rural farm population into the farm income and estimate the average family at 4 people to the family, the annual income was only $936 per year per family.

These are small people, very small people, of which there are thousands upon thousands of them. Cotton is their principal crop. The average cotton allotment is only 8 acres to the family. It has been reduced from a higher figure under the control program down to approximately 8 acres. The second crop is cattle; the third grain; and the fourth dairying.

There are 22 small streams that feed the Tombigbee River. The cause of the floods in that section is heavy rainfall. The average annual rainfall is between 50 and 60 inches per year. Most of the rain falls in the late winter, spring, and the month of July. That being the case, it is obvious the floods come at a time when the crops have been seeded and are in their younger development stage.

Time after time I have driven through that section and seen acre after acre of cotton and corn inundated and completely washed away. It is not an extraordinary thing for these people to have to plant and replant their crop three times a year. How they have endured it this long, I do not know.

I would like to refer to a part of the report, on page 5, and I would like to read from it, if I may:

> General floods in the basin occur on an average of once in about 10 years and are usually caused by widespread winter rainfall. Intense local rainfall produces flooding on the tributaries several times a year. Floods may occur at any time over any part of the basin, but are more frequent in winter and spring. At Columbus, flood stage on the Tombigbee River has been equaled or exceeded 87 times in 60 years of record, an average of 1.5 per year. Twenty-five of the floods were in the cropping season and five were major floods. Flooding occurs on the principal tributaries on an average of 2 to 8 times a year and on minor tributaries on an average of 5 to 14 times a year.

And these are the tributaries about which we are talking right now.

I have already mentioned the population and so on which is referred to in that particular section.

Now I would like to turn to section 49 of the engineers' report and read to you from that:

Flood-producing storms usually last from 2 to 4 days, and may center over any portion of the basin. With normal runoff conditions, about 5 to 6 inches of intense and general rainfall are usually required to produce an extensive flood. However, on many of the minor tributaries 1 to 3 inches of intense rainfall, which may occur several times a year, are sufficient to produce local floods. Winter and spring floods often cover a large portion of the basin and produce most of the major inundations, while summer storms are usually very intense over much smaller areas, producing serious local floods.

On page 21 of the report references are made to the storm of February 1948, which was a major storm; the storm of January 1949, which was a major storm; the storm of March 1951, which was a major storm; and I would particularly like to read this sentence from the paragraph relating to the storm of March 1951:

The center of heaviest rainfall was in the upper Tombigbee Basin at Okolona, Miss., where a total of 15.07 inches was recorded.

That is where I live. And for a moment I thought we soon would all be living elsewhere.

You have seen photographs of the horrible flood visited upon us in 1955.

On page 23 of the report, section 66, I would like to read from that:

During the 43-year period of record, 1909–52, flood stage has been equaled or exceeded 109 times, or an average of 2.5 times a year. The majority of these floods occurred in the winter and early spring causing only slight damage. However, 37 floods occurred in the cropping season between April and November with the average frequency being less than once a year. Thus, farmers in certain parts of the flood plain can expect to lose at least part of their crops every year due to flood conditions.

They did not say occasionally; they said every year.

On page 25 of the report I would like to read from section 70:

The upper tributaries of the Tombigbee River, the East and West Forks, are frequently flooded. During the period of record at Fulton, Miss., on the East Fork, 1929 through 1952, flood stage of 12 feet has been equaled or exceeded 194 times in the 24 years, an average of 8.1 times a year. Floods during the cropping season, April through November, have occurred 84 times, an average of 3.5 times a year.

And from section 71:

The Tombigbee River is joined by three major tributaries, the Buttahatchie and Tibbee Rivers and Luxapalila Creek, near Columbus. Studies indicate that damaging floods of relatively short duration occur 4 to 7 times a year with about 2 floods occurring during each growing and harvesting season.

I will not go into further detail on the report. Time is running short.

Now, the question of a contribution has been raised. There is no question before the committee, I am sure, but that a terrible situation exists in this particular section of Mississippi and Alabama. The report of the engineers has set out the average annual income of these people, and while I am sure they have made their recommendations in accordance with the standards and guides that have heretofore been laid down, it stands to reason these people, with the income they have, cannot possibly contribute the amount of money as recommended in order to get this water off of their backs.

Flood control has long been a Federal responsibility and is so accepted statutorily by the Congress and by the Government. The enhancement of other lands in the area only happens to be coincidental. Personally, I wish there were no enhancement. I have not come here and my people have not come here asking you to enhance their land. If there were no enhancement, there would be no question about this project going through. Because there is some land enhancement, which is only incidental, and because that contribution is sufficient to defeat the project, then is this committee and the Congress going to say, "We are going to require you people, small though you are, unorganized though you are, few voices though you have, to endure year in and year out and month in and month out these floods which have occurred year after year and which are getting worse?" I do not begrudge the amounts spent in other sections for flood control. The dollars that have been appropriated since I have been here have been appropriated with my vote.

More people seem to think of Mississippi, those who have not been there, as a level, low, wet country. The fact is that situation did exist in the district of my distinguished colleague, Mr. Smith. The flood-control problem in that section is being solved. I have before me the map locating those projects, and I am glad they have them; they needed them. Money has been spent at Mobile; money has been spent at New Orleans; money has been spent in the Ohio Valley, and all the other sections of the country. But according to the map which I have before me as supplied by the engineers some years ago, no major flood-control dollars have been spent in my section. Similar flood problems exist in my own section, though not as severe as they were in the delta 35 years ago. Yet year after year my people have been called upon to endure the devastating floods which have been visited upon them and which are contributing materially to their very low standard of living, which floods have kept their average annual income down to about $936 per family.

I have in my office, I did not bring them here, 6 or 8 projects, maybe more, where the Congress has relieved the people of the local contributions. I have in mind one particularly which was approved about 2 years ago in one of the States of the upper Midwest, where they were relieved of the local contribution because—and I quote either from the report or some language somewhere connected with the project—because of the small income of the people in that particular watershed. This project gained the approval of Congress without local contributions.

I am asking this committee to approve this project without all of this local contribution, and when I say without all, I am excepting particularly the land which we will be required to supply, the bridges and other structures which we will be required to build, the value of which comes to about $1,089,000. That is a pretty substantial sum itself. We believe we can meet it. We will meet it. I urge and plead with you to give serious consideration to relieving these people of this problem.

The farm income of our country is in a pretty bad condition now. Of all of the times these farm people could not bear this contribution, it is now. We have a farm program before the Congress now. It affects all sections of the country and it particularly affects my section

because the income in my section principally comes from agriculture.

I hope I have not asked too much of the committee. I do not know what previous appeals have been made for previous projects. I do not know if they have come pleading as I have come this morning; but I say to you, Mr. Chairman and members of the committee, for the purpose of emphasizing, these people cannot contribute $6 million in cash. If it is required, this project will surely fail because I am sure they could not meet it.

Thank you, Mr. Chairman.

Mr. SMITH. Mr. Chairman, I ask unanimous consent that Mr. Abernethy be permitted to amend his remark to change the word "solve" in respect to the flood-control problems in my district to "moving in that direction."

Mr. ABERNETHY. I will be glad to do that.

Mr. DAVIS. I would like to say in all my years as a member of the House, I have never heard a more capable presentation. It was sound, it was logical, it was reasonable.

Mr. ABERNETHY. Thank you.

Mr. DAVIS. We all realize there is a farm bill on the floor today, but if there is no objection I would like us to continue this hearing at least until we have a quorum call. Mr. Abernethy, would you be agreeable to this, because I know you are very interested in this bill today because it comes from your committee. Could you stay here until we have a quorum call?

Mr. ABERNETHY. I could stay until there is a quorum call; yes.

Mr. DAVIS. Because I am sure there will be questions some of my colleagues would like to ask you.

Mr. Smith, do you have any further questions? Before you came in, Mr. Abernethy, your colleague, Mr. Smith, had made a very fine approach to this question along the lines which you have yourself taken care of.

Mr. MACK. Mr. Chairman.

Mr. DAVIS. Mr. Mack.

Mr. MACK. We have here, undoubtedly, very serious flood conditions of frequent occurrence. We have in the report, as I read it, conflicting views from the engineers and by the Department of Agriculture. The engineers say in their report the plan they are proposing is the only feasible and logical one for controlling the floods. The Department of Agriculture recommends withholding action until the people prepare plans for works in the upstream area.

You are a member of the Committee on Agriculture and are much more familiar than I am, certainly, with what the Department of Agriculture does. In your opinion, how long would it take the Department of Agriculture to handle this situation if we acceded to their request to delay action on this project until that Department did something in the upper reaches of the valley?

Mr. ABERNETHY. I am glad you asked that. I will answer by simply saying I do not think they can ever meet this problem through an agricultural program.

May I speak off the record?

Mr. DAVIS. Yes.

(Discussion off the record.)

Mr. MACK. Do you think this conflict between the Department of Agriculture and the engineers as to who should do flood-control work is preventing a coordinated program or adding to the cost of flood-control?

Mr. ABERNETHY. I do not know whether it is adding to the cost. It is not adding to the cost in Tombigbee because no money is being spent. As to whether it is preventing it, it may be in some instances.

Mr. MACK. That is all, Mr. Chairman.

Mr. DAVIS. Governor Dempsey.

Mr. DEMPSEY. Mr. Abernethy, the original soil-conservation bill I introduced in the House had nothing to do with projects such as this.

Mr. ABERNETHY. That is right.

Mr. DEMPSEY. Recently the soil-conservation program was recommended by the Department and adopted by your committee. But they were not set up to do a job of this kind.

Mr. ABERNETHY. I was familiar with the fact you were the author of that legislation, which is very good legislation, incidentally, showing your usual good foresight.

Mr. DEMPSEY. Listen, I am for the project.

Mr. ABERNETHY. I understand. I had reference to the watershed program when I said if there is any movement on foot—there are conversations, and I have talked with the soil-conservation people and they are trying to help, but we have gotten nowhere.

Mr. DEMPSEY. I think in the small jobs it will be an aid, but I think in the large jobs they had better let the engineers do it.

Mr. ABERNETHY. I think this is a good job for the engineers.

Mr. BECKER. Mr. Chairman.

Mr. DAVIS. Mr. Becker.

Mr. BECKER. As I see it, there are three problems here, (1) the report and recommendation of the Army engineers; (2) the conflict of the Department of Agriculture; and (3) the question of local contribution.

Mr. ABERNETHY. I think the gentleman is correct.

Mr. BECKER. I wonder if you would agree with this suggestion. Why could we not, before we proceed much further, invite down here quickly people from the Department of Agriculture and see what they are doing presently to expedite this situation? If we are not satisfied, we could then proceed with our recommendation.

The only reason I make that suggestion, you know the procedures here better than I do, and I am trying to prevent snags. If we get what the Department of Agriculture has in mind and then make our recommendation, I think we would be on sounder ground.

Mr. ABERNETHY. Anything the gentleman can do along that line——

Mr. BECKER. That is only a suggestion I have to make.

Mr. DAVIS. I feel we would be losing time if we sent for the Department of Agriculture, Mr. Becker. If the Chair may make a suggestion, I would like for us to confine our discussion now to your third point. What about this local distribution? What will this committee do on that point? Would you mind asking some questions in that direction on this side and this side? I think that will control this situation.

Mr. SCUDDER. Mr. Chairman, I am sorry I came in late and did not hear the full testimony, but as I see these projects there have been

local contributions. I have two projects in my district where we put up a considerable amount of money for local participation. It was not an easy matter to raise local funds, but when you have a vast valley such as this you could easily form a district, as we had to do in California, and submit the question to the people for a vote, the small farmer would be paying very little, not in excess of $1 per acre. I question whether we can disrupt the policy laid down by the engineers to apply it in some places and not apply it all over the country.

Mr. DAVIS. Pardon me just a moment. I think this is a matter of importance, and since we have a quorum call I think we should take it up first tomorrow as a continuation rather than taking up a new project.

Without objection we will meet tomorrow at 10 o'clock. The committee stands adjourned until 10 o'clock tomorrow morning, at which time we will ask Mr. Abernethy to return and Mr. Scudder can continue his questioning.

(Thereupon, at 11:10 a. m., the hearing was adjourned until Friday, May 4, 1956, at 10 a. m.)

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FLOOD CONTROL OMNIBUS BILL

FRIDAY, MAY 4, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D.C.

The subcommittee met, pursuant to call, at 10:05 a. m., in room 1302, New House Office Building, Hon. Clifford Davis, chairman of the subcommittee, presiding.

Mr. DAVIS. The committee will be in order.

We are resuming our sessions. We had just a little work left to do on the Tombigbee River project yesterday, and we had not heard from our colleague, Mr. Selden, of Alabama.

TOMBIGBEE RIVER, MISS. AND ALA.

STATEMENT OF HON. ARMISTEAD I. SELDEN, JR., MEMBER OF CONGRESS FROM THE STATE OF ALABAMA

Mr. SELDEN. Mr. Chairman, I have to go to another committee meeting. They called me and told me there was not a quorum present. Therefore, with your permission, I would like to insert this little statement. I think I could sum it up very briefly in about three sentences, giving you my views on it.

I concur fully in what my colleague, Mr. Abernethy, said yesterday. He made a very fine statement. I do not think there is any question that there is a serious flood condition of frequent occurrence on the Tombigbee River and its tributaries. I think the report of the Corps of Engineers does cover that very thoroughly.

Congressman Abernethy did point out yesterday that he was convinced that the current practices of the Department of Agriculture are not sufficient at this time to remedy flood conditions of the Tombigbee River and its tributaries. I certainly concur with Congressman Abernethy in his remarks on that subject.

I am also of the opinion, Mr. Chairman, that local interests may be unable to provide the non-Federal cash contributions that are recommended by the Corps of Engineers report. Therefore, in addition to the approval of this authorization, I respectfully urge the committee to give serious consideration to relieving the local interests of this area from all of or at least a part of the recommended non-Federal cash contribution.

With your permission I would like to insert this short statement in the record.

Mr. DAVIS. Without objection, it will be so ordered.

(The prepared statement of Mr. Selden is as follows:)

STATEMENT OF REPRESENTATIVE ARMISTEAD I. SELDEN, JR., 6TH DISTRICT OF ALABAMA

According to the report of the Corps of Engineers, there is a serious flood condition of frequent occurrence on the Tombigbee River and its tributaries. Rainfall in the basin area is frequently intense, and floodwaters inundate many reaches in the areas along the tributary streams and the main Tombigbee River.

Although the greater part of flood losses occur in the rural areas, urban areas in the region inundated by major floods also suffer considerable damage and inconvenience.

Two of the tributaries of the Tombigbee River—the Noxubee River and the Sipsey River—are partially located in the Sixth Congressional District of Alabama which I have the privilege to represent. The Sipsey River flows through Tuscaloosa and Greene Counties in my district. The Noxubee River flows southeasterly 135 miles through Noxubee County, Miss., and Sumter County, Ala., also in my district, to join the Tombigbee River just above Gainesville in Sumter County.

Ruinous floods occur in the area about once every 10 years, resulting in costly damage to agriculture, which is the main livelihood of the people who live in the basin area. Crops on inundated land are either destroyed or the yields greatly reduced.

As you know, the Board of Engineers for Rivers and Harbors has recommended improvement of the Tombigbee River and tributaries by means of channel clearing and rectification on 22 tributary streams, generally in accordance with the plans of the district engineer. The district engineer's plan involves about 466 miles of streams and provides principally for clearing all growth except trees larger than 10 inches in diameter from within 20 feet of the top of banks; clearing the channels of snags, debris, and drift jams; and excavating channel cutoffs and enlargements.

The Corps of Engineers has stated that the flood-control improvements recommended in their report are both warranted and economically justified.

My colleague, Congressman Abernethy of Mississippi, who covered this matter very thoroughly in his remarks, stated he was convinced that current practices of the Department of Agriculture are not sufficient to remedy the flood conditions of the Tombigbee River and its tributaries. I concur with Congressman Abernethy's statement on this subject.

Mr. Chairman, I am also of the opinion that local interests may be unable to provide the non-Federal cash contributions recommended by the report of the Corps of Engineers. Therefore, in addition to the approval of this authorization, I respectfully urge the committee to give serious consideration to relieving the local interests of this area of all or at least a portion of the recommended non-Federal cash contributions.

Mr. DAVIS. We appreciate your personal appearance here this morning and recognize that you must go to another meeting.

Mr. SELDEN. Thank you, sir.

Mr. DAVIS. Our colleague, Mr. Ellicott, of Alabama, will be heard.

STATEMENT OF HON. CARL ELLIOTT, MEMBER OF CONGRESS FROM THE STATE OF ALABAMA

Mr. ELLIOTT. Mr. Chairman and members of the subcommittee, I appreciate this opportunity to appear before you to urge that you recommend to the full committee, and to the United States House of Representatives, the Tombigbee River and Tributaries, Mississippi and Alabama, Report of the Corps of United States Engineers, for authorization in the forthcoming flood-control authorization bill.

This matter has been too long delayed. The chairman and members of this subcommittee will observe upon reading from pages 3 and 4 of the report that the resolutions authorizing the Corps of Engineers to study and report on this matter "with a view to determining whether any improvements of the Tombigbee River and tributaries in the States of Mississippi and Alabama for flood control is advis-

able at this time" were passed by the House of Representatives in the year 1939. Since then, wars and rumors of wars, an unbalanced budget, unprecedented defense expenditures of our country both for itself and its allies all over the world, have prevented the report from being completed. I am happy that it is now before this subcommittee.

When the report was before the Board of Engineers for Rivers and Harbors in 1953, I had the privilege of appearing before the Board and urging a favorable report on the recommended projects. Since then I have urged the Department of the Army to forward to report to the Congress.

I feel that the projects recommended are good; that they economically feasible; that they are capable of standing on their own merits; and that they are justifiable from every standpoint.

However, there is one part of the report with which I disagree. I feel that the Corps of Engineers is attempting to assess too much of the cost of the projects against the local interests. An average of 29 percent of the total costs for improvements is assessed to local interests, and it is, in my judgment, an excessive amount.

The flood problem on the Tombigbee and its tributaries is critical. The area has an annual average rainfall of 52 inches, and intense rainfall of from 1 to 3 inches occurs several times each year, which produces local floods.

Three of the Tombigbee's tributaries designated for improvement—the Buttachatchie River, the Sipsey River, and the Luxapalila Creek—drain a large part of Marion, Lamar, Fayette, and Pickens Counties in the 7th Congressional District of Alabama.

The economy of this region is predominantly agricultural, with some lumbering and manufacturing. The agriculture consists principally of crops such as corn, cotton, hay, and the raising of livestock and poultry.

Damaging floods along the Buttachatchie and the Luxapalila occur 4 to 7 times a year. The Sipsey River, in the vicinity of Fayette, Ala., averages 5 floods a year. You can readily see the damage accruing to our farms and farmers in these areas. The annual average flood loss along the Buttachatchie, the Luxapalila, and the Sipsey is approximately $352,000.

In addition to the losses from farm production, many miles of secondary roads and bridges are damaged annually and traffic is is interrupted.

Under the recommendations of the Corps of Engineers as provided in the report now before this subcommittee, the local citizens living along the tributaries of the Tombigbee are to cooperate in constructing the project.

In addition to contributing a substantial portion of the actual construction costs, the local interests agree to provide without cost to the United States all lands, easements, and rights-of-way necessary for construction of the project; to make, without cost to the United States the changes, alterations, additions, or relocations of any public utility made necessary by the work of the project; to hold and save the United States free from damages due to the construction; and to maintain all the works after completion in accordance with regulations prescribed by the Secretary of the Army.

The improvement of the Buttachatchie, the Luxapalila, and the Sipsey tributaries has the support and approval of the people who live in these valleys, and they are ready and willing to do their part. Certainly this project is necessary to the welfare of the area.

I trust that this committee will approve the projects. I also trust that the committee will take a reasonable view of the local responsibilities involved. The local interests, namely the counties of Marion, Lamar, Fayette, and Pickens in the 7th Congressional District, and several others in both Alabama and Mississippi, cannot without great detriment to themselves, raise the money which the report of the Corps of United States Engineers suggests that they raise.

Therefore, Mr. Chairman, and members of the subcommittee, I suggest and recommend that you eliminate the requirement that local interests contribute a substantial part of the costs of this project. Let's make it an all-Federal project. Let's push this development forward. Let's authorize it so it can get started.

Mr. DAVIS. Thank you, Mr. Elliott.

Mr. ELLIOTT. Thank you.

Mr. DAVIS. Mr. Abernethy is here. Do any of the members have any further questions to ask him this morning about the project which he so ably presented on yesterday?

Mr. SCUDDER. Mr. Chairman.

Mr. DAVIS. Mr. Scudder.

Mr. SCUDDER. I would like to know how many square miles there are in this project, or how many acres.

STATEMENT OF HON. THOMAS ABERNETHY, MEMBER OF CONGRESS FROM THE STATE OF MISSISSIPPI—Resumed

Mr. ABERNETHY. I do not know whether I can answer that or not, Mr. Scudder. Maybe the engineers can. About 12 or 13 or 14 counties are affected.

Mr. BRENNAN. The drainage basin is 8,900 square miles. The total area which is affected amounts to about 200,000 acres. It has varying degrees of protection.

Mr. SCUDDER. How many did you say?

Mr. BRENNAN. 200,000 acres.

Mr. SCUDDER. It seems to me $6 million would not be much to raise even if you figured it on the basis of the acreage value to be determined. The whole project would not amount to $1 per acre.

Mr. BRENNAN. The actual protection cannot be quite measured that way because the area is not completely protected. This area is protected against the most frequent floods, but it is not protected against the higher and less frequent floods, and more damaging ones.

Mr. SCUDDER. Of course, I realize there would be quite a number of cities involved and it would not all fall on the basis of areage. I was just trying to get some idea as to the vastness of the area and how much the improvement would amount to, it seems to be a rather minimal amount. I know the engineers have a method of computing the allocation of costs on these programs. If we are to enter into a program of eliminating the participating moneys, why, that would affect all future programs, and it would be unfair to those who had met the obligation by putting up their share in the past.

I have no further questions.

Mr. MACK. Mr. Brennan, what was the amount of money involved in the so-called appreciation of land values?

Mr. BRENNAN. I have that figure right here, sir.

Mr. MACK. The total amount, I understand, was $7,428,000 for local contribution.

Mr. BRENNAN. The local cash contribution is $6,338,000, sir.

Mr. MACK. That is the appreciation of the land due to these works?

Mr. BRENNAN. Yes, sir. Of the total of $7,428,000, the part representing the appreciation of land is $6,338,000

Mr. MACK. The rest is right-of-way acquisition and removal and relocation of bridges?

Mr. BRENNAN. That is correct, sir.

Mr. ABERNETHY. I might add, Mr. Mack, that I think that figure comes to about $1,080,000.

Mr. MACK. And you are willing to pay that?

Mr. ABERNETHY. I would be delighted.

Mr. DEMPSEY. I notice in the 2 or 3 projects that you had before you brought this one up there was some $500,000 involved in one of them and some $10,000 in local contributions. It seems to me this is way out of proportion.

Mr. BRENNAN. The other projects which have come up so far, Mr. Dempsey, did not have land enhancement in them, with one exception, which was Bayou Chevreuil in Louisiana, which had a local contribution of 29 percent of the construction cost.

Mr. DEMPSEY. Who makes this appraisal of the land enhancement?

Mr. BRENNAN. It is made as part of the flood damage survey by the Corps of Engineers.

Mr. DEMPSEY. That is all, Mr. Chairman.

Mr. SCHWENGEL. Mr. Chairman, I have a question I would like to address to Congressman Abernethy, if I may.

Mr. DAVIS. Mr. Schwengel.

Mr. SCHWENGEL. First let me say, Congressman, that I live on the Mississippi River, and I know something about floods in our area, although we certainly do not have them as frequently as your testimony shows you have them in that area you represent, and which you talked so eloquently about yesterday.

In your statement you said or indicated, at least, that the flood conditions are getting worse progressively.

Mr. ABERNETHY. Yes, sir.

Mr. SCHWENGEL. From year to year.

Mr. ABERNETHY. Yes, sir.

Mr. SCHWENGEL. My question is, is that due to any Government policy in the past in any way?

Mr. ABERNETHY. I think I could say it is due to Government policy only because—and I do not want to charge anyone with willful neglect—but I will say because of neglect. These projects for these small streams have been a subject of consideration for a long number of years. It has been with considerable difficulty—and I am new in this particular project, as I said yesterday, because it is a new part of the district I represent—but we have been unable until the summer before last to get a project as far as the Bureau of the Budget. There are probably good reasons for it. I am not charging anyone with neglect—certainly not willful neglect.

Mr. DAVIS. If you will pardon me, that was only after that terrific damage you had there.

Mr. ABERNETHY. It was only after the terrific damage from the 1955 flood that I was able to blow the project out of the Bureau of the Budget. The reason why it came out then was because the gentlemen with whom I talked that morning happened to hear the same radio reports that I heard, which I picked up en route to my office. I would like to go off the record for a moment.

(Discussion off the record.)

Mr. SCHWENGEL. One other question. What I was leading up to is this: I believe we ought to do everything we can to preserve the water that we have. It is white gold in my book. Are you prepared to say whether or not a good job and real progress is being made in preserving that water back in the hills in the way of a soil-conservation program, and that sort of thing.

Mr. ABERNETHY. No, sir. Good progress is not being made. I presume you have reference to the controlling of the water and turning it into the ground.

Mr. SCHWENGEL. Yes.

Mr. ABERNETHY. The facts about it are that I think we have more water than we can turn into the ground. I think the Corps of Engineers have given some consideration to some retaining basins. However, I have had some experience with those things, as my colleague from Mississippi knows. Of course, I was not too happy with the result because the basins were put on me in my district. However, the people are perfectly satisfied now, but those large basins or lakes bring hardships themselves in the moving of people, and the removal of cemeteries, and the destruction of homes, and so forth.

If we have to have that to stop this water I think we could go through with it. I might not last but one term here, but I would be willing for them to have it if that would get the water off of them. I do not believe with what we know of the soil-conservation program, the catching and conservation of the water, the turning of it into the ground, that it is possible to control this problem through that method. I just know it is not possible. It might help.

My people are hurting now. I am not willing to wait. I think if we wait a few more years the streams there that are now feeding the Tombigbee will fill up. They are filling up now. The Tombigbee River was navigable for many years up to this vicinity right here in the neighborhood of Amory. That was many years ago.

Mr. SCHWENGEL. When you say "navigable" what do you mean? How many feet in depth?

Mr. ABERNETHY. I mean navigation was actually taking place. Barges moved up to that point in regular commerce. But with the coming of the railroads in that section, it eliminated navigation many years ago. As a result from year to year this stream and all of these tributaries have filled up. I presume some of that was brought about by the clearing of more land and the more rapid flow of water as a result. There is no question but what that has brought on some of our troubles.

Again I would like to emphasize that I do not like to come before a committee and plead poverty. People who plead poverty do not in my judgment have too much pride. Unfortunately, these people are little people. They do have pride. The Lord must have loved

them because he made so many of them. The average family down there, I would say, is a family of 4—a man and his wife and 2 children—who have an average earning and an annual income, with our small acreage allotments of cotton and other crops, of only about $936 a year. With all deference to you, Mr. Scudder, these people cannot raise $6 million.

I believe if you would propound this question to one of these gentlemen, the engineers, sitting behind me here this morning he will agree with me. In fact, one of them did agree when I conferred with him last year. He said they could not do it.

Mr. SCUDDER. Mr. Abernethy, I was only trying to develop what the policy of this committee is going to be and what the policy of the engineers will continue to be. I would like to see it developed because my district is badly involved in floods, and if we can get direct grants from the Federal Government I know my people will be very happy to receive the money.

Now as to whether we are going to get away from the policy we have had previously, I think we should settle the matter of policy that this committee is going to have to take in consideration of a lot of projects which are being proposed.

Mr. ABERNETHY. I appreciate that.

Mr. SCUDDER. I have some flood conditions in a district where the people are less able to foot the bill than your people are, because there are so few landowners in some of these areas. It is not that the land does not have a value and it is not that individuals are not cooperative, but there has to be some policy established.

Mr. ABERNETHY. There is very little benefit that will come from this project to the municipalities—very little. I am confident that the municipalities—and there are not many municipalities there and most of those that are in there are small——

Mr. DAVIS. They are little towns.

Mr. ABERNETHY. Small towns and villages, and just little places. I am confident they will be unwilling to bond themselves to get this water off of these little rural valleys. I am absolutely confident of that.

I made this statement yesterday before you came in, I think. I am not seeking land enhancement. They are not seeking land enhancement here. I said yesterday, and I repeat today, that it is unfortunate there may be some land enhancement in this thing. The object, and the only object, is to get the water off of those who are now being flooded. The objective is not to drain somebody's land or improve somebody's land, which merely results as something coincidental to eliminating the flood problem. If it were not for the land enhancement this project would offer no problem at all. There is one of these streams where there is no land enhancement at all and the local contribution in that particular section is zero. I think I can find it here in just a second. It is James Creek. The amount of money involved is small. It is only $40,500, although there is a contribution of $10,000, one-fifth of the entire project, which the people would be called upon to meet by way of contributions in land and rights-of-way and the construction of such bridges as might have to be constructed as a result of the flood-control works.

I know the Army enginers cannot take the land enhancement out of it. I wish they could. If they could it would settle this particular point.

Mr. ROGERS. Mr. Chairman.

Mr. DAVIS. Mr. Rogers.

Mr. ROGERS. How many counties are actually affected here, would you say?

Mr. ABERNETHY. I would say part of 14, or something like that.

Mr. ROGERS. About 14?

Mr. ABERNETHY. Part of 14 counties, or thereabouts. I cannot tell from this map.

Mr. BRENNAN. About 20, sir.

Mr. ABERNETHY. I am corrected. It is about 20.

Mr. ROGERS. Thank you.

Mr. SMITH. There is one point I would like to bring out in the record in conection with the testimony about land enhancement that Mr. Brennan gave yesterday. As I understand it, the way that they make a determination about land enhancement is to show that if the land as a result of this is enabled to be put to better types of usage, it is therefore enhanced. The point I think that should be made—and I would like to confirm it—is that this area not in the recent past, but a relatively long time ago as far as Mississippi is concerned, beginning about a hundred years ago, a good part of it was the richest agricultural portion of the State. That was at the time when they had navigation there and they had a cotton-gin port. It was some of the most valuable land in the State, and some of the most valuable in the country, for that matter. It has deteriorated during this long period of time when there has been no flood-control program there.

Mr. ABERNETHY. It has deteriorated tremendously.

Mr. Chairman, may I say to you and your colleagues that I am very grateful and most appreciative for the consideration that you have given this project. I certainly hope you will see fit to accord us the relief that I feel the people are entitled to.

Mr. DAVIS. Thank you, Mr. Abernethy.

Mr. ABERNETHY. I certainly thank you.

PURGATOIRE RIVER, COLO.

Mr. DAVIS. We are going to pass next to the Purgatoire River in Colorado, House Document 325. It is our custom to hear from the Corps of Engineers first.

We have Mr. Earle Jones representing the Corps of Engineers, who will make his presentation, and then we will hear from our colleague, Congressman Chenoweth, and then from the mayor of Trinidad and the past president of the Chamber of Commerce of Trinidad. If they can reduce their running schedule a little bit, with the permission of the committee we are going to look at a 15-minute moving picture of this river, which I think may be rather revealing.

So, Mr. Jones, will you come around here to take charge of this?

STATEMENT OF EARLE H. JONES, CORPS OF ENGINEERS

Mr. JONES. Mr. Chairman and members of the committee, the study on the Purgatoire River was authorized by a resolution of the House

Flood Control Committee in 1945. As indicated by the chairman, it is printed in House Document 325 of the 84th Congress.

The Purgatoire River is located in southeastern Colorado and it is a tributary of the Arkansas River above John Martin Reservoir. There is at this time an existing authorization for a project for the protection of the city of Trinidad against floods consisting of levees and channel improvement works. However, the local people have requested that additional flood protection be provided by means of a reservoir which would also provide water for irrigation purposes.

The city of Trinidad, and the area around there, is subject to flash floods. They are dangerous floods and there have been quite a number that have occurred. The major one was in 1904 and it did damage in the order of about $2 million. In order to control the floods, the Chief of Engineers recommends a reservoir be provided about 4 miles above the city of Trinidad, which would provide flood-control storage and storage for irrigation purposes. This reservoir would cost about $17 million. The cost has been allocated between flood control and irrigation on the basis of $8,268,000 for flood control and $8,732,000 to irrigation. The reservoir would prevent damages from major floods.

There was a flood in May 1955 which did damage in the order of around $2 million to Trinidad and the surrounding area. Ninety percent of this damage would have been prevented by this reservoir.

The report has been submitted to all interested Federal agencies and to the States of Colorado and Kansas. The States both agreed to the proposal with the proposed method of operation of the reservoir. The Federal agencies, the Department of Agriculture, the Federal Power Commission, and the Public Health Service, all concurred in the proposal. The Bureau of Reclamation of the Department of the Interior raised a number of questions, the principal one of which was the question as to the repayment and whether or not it should be handled by the Bureau of Reclamation. Also they raised the question should the Bureau of Reclamation operate it since the use of the reservoir would be about 50–50 for flood control and irrigation. They also raised a question in regard to some coking coal reserves which would be flooded to some extent by the reservoir.

In regard to repayment, the Chief of Engineers agrees that the Bureau of Reclamation should handle all repayment negotiations.

With respect to operation of the reservoir, the Chief of Engineers believes that the Corps of Engineers should operate the reservoir.

With respect to the coking coal, the mines that would be affected are no longer in operation. Any mineral values that are there would be compensated for in the purchase of the lands.

The Bureau of the Budget in commenting on the report raised a question which I would like to read. They say there is no objection to the submission of the report to the Congress, but that:

1. The Federal share in the cost of the project should be limited to—
   (*a*) not more than the amount which the annual flood-control benefits, computed in accordance with current practice, if applied to the costs allocated to flood control, could amortize, with interest, over a period of not more than 50 years, plus
   (*b*) the provision of interest-free financing for the irrigation investment over a period of not more than 50 years; or
2. The language authorizing the project should specifically provide for the Federal Government to bear any additional subsidies involved.

In general, the first question raised by the Bureau of the Budget was whether or not the flood control and irrigation were in themselves justified. The answer to that is that each is justified.

On the question about the interest-free financing, the recommendation in the report of the Chief of Engineers, which is based on the recommendation of the Bureau of Reclamation, calls for a repayment period of 75 years. The Bureau of the Budget thinks the repayment period should be cut down to 50 years. If the repayment period were cut down to 50 years on the basis of the repayment ability the local people would be able to repay $7,050,000, and that would leave a balance of $1,682,000, which is allocated to irrigation remaining unpaid at the end of the 50-year period.

The Bureau of the Budget, as I indicated, suggested that language authorizing the project should specifically provide that the Federal Government should bear this additional cost.

That completes my presentation, Mr. Chairman.

Mr. DEMPSEY. What number of acres will be irrigated?

Mr. JONES. There are about 19,000 acres under irrigation now. There is not sufficient water for adequate irrigation of that acreage.

Mr. DEMPSEY. This is to supplement it?

Mr. JONES. This is supplemental water. Yes, sir.

Mr. DEMPSEY. Is that between Trinidad and——

Mr. JONES. No, sir. It is the area downstream from Trinidad. Incidentally, this map is confusing. North is toward the left edge of the map.

Mr. DEMPSEY. Where is Raton from there? Is that toward Raton or toward La Junta?

Mr. JONES. I do not know, sir.

Mr. DONNELLY. It flows this way, toward La Junta.

Mr. MACK. How will this affect the irrigation? Will it permit a longer growing season or a greater variety of crops, or what?

Mr. JONES. It will assure or more nearly assure the availability of water at the time it is needed. At the present time they divert from normal streamflows which are very erratic. They also do a good bit of their diversion in the wintertime when, of course, there are no crops grown. So the main assistance the project will be to irrigation is to make the water available when it is needed.

Mr. MACK. It will increase the productivity of these 19,000 acres then?

Mr. JONES. Yes, sir. It would.

Mr. MACK. That is all.

Mr. SCUDDER. Is there flood control involved in this project?

Mr. JONES. Yes, sir. The flood control amounts to about 50 percent of the project; both with respect to the benefits and the flood-control storage. In this project there is also a small amount of land enhancement. The Chief of Engineers recommends that the local people contribute on the basis of that small amount of land enhancement and the contribution amounts to about $372,000.

Mr. ROGERS. What is the frequency of floods in this area? What has been the history of it?

Mr. JONES. The largest flood of record occurred in 1904. There have been other floods in 1925, 1942, 1950, and 1955. Those floods have been in the order of 30,000 to 35,000 cubic feet per second. The 1904 flood, which is the maximum flood of record, was 45,000 cubic feet per

second. The 1904 flood has a probable frequency of around 40 to 50 years.

Mr. ROGERS. What is the total damage that the Corps of Engineers figures has been done by these floods?

Mr. JONES. The total damage that has been done?

Mr. ROGERS. By flooding.

Mr. JONES. For all floods?

Mr. ROGERS. For whatever figures you have on it.

Mr. JONES. The figures I have are that the average annual damages from floods amount to about $225,000 a year.

Mr. ROGERS. What is the carrying cost per year of this project?

Mr. JONES. The annual charges on this project amount to $552,000 a year. The annual benefits amount to $590,000 a year. The benefit-cost ratio then is about 1.1.

Mr. ROGERS. In other words, your damages are about $225,000 a year and your cost amounts to $552,000 a year, and your benefits are $590,000 a year.

Mr. JONES. The benefits come from the prevention of flood damages, a small amount of enhancement, and irrigation. Irrigation is about 50 percent.

Mr. ROGERS. What is the percentage of the land enhancement? There was some talk about that since the water would be made available for them at times when it is needed.

Mr. JONES. The land enhancement in this project results from the ability to use land within the city of Trinidad, which is now of very low value. The enhancement here does not result from additional water——

Mr. ROGERS. In other words, you are not considering that as part of the enhancement at all, that is, the fact that you may be able to use more water?

Mr. JONES. No, sir. That is an irrigation benefit which is a reimbursable cost.

Mr. ROGERS. Thank you.

Mr. BALDWIN. Mr. Chairman.

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. Are there going to be any families displaced by this flooded area?

Mr. JONES. Yes; sir. There are some very small communities that will be displaced.

Mr. BALDWIN. How many people would be displaced?

Mr. JONES. I do not know that at the moment. I can supply it for the record.

Mr. BALDWIN. I was wondering if we were talking about 20, or 200, or 2,000.

Mr. JONES. I would say it is probably more on the order of about 200 or less.

Mr. BALDWIN. Have you run into any rather strong opposition to this project from those people?

Mr. JONES. No, sir. There has been no appreciable opposition at all to this project.

Mr. BALDWIN. Even from the people who would be forced to move?

Mr. JONES. No, sir. Not extreme. Naturally those people are reluctant to move but there is no opposition in the sense that it sometimes arises.

Mr. BALDWIN. No further questions.

Mr. DAVIS. Thank you.

Mr. Chenoweth, if you will come around I am going to ask you to introduce your civilian witnesses after you make your own statement.

STATEMENT OF HON. J. EDGAR CHENOWETH, MEMBER OF CONGRESS FROM THE STATE OF COLORADO

Mr. CHENOWETH. Mr. Chairman and members of the committee, I want to thank you for including the Purgatoire River project in your hearings. I might say this project is located at Trinidad, Colo., which happens to be my hometown. I was born and raised there and as a little boy I can remember the 1904 flood. I believe it was stated it did some $2 million worth of damage. We have had some recurring floods since then also.

I have a prepared statement which I would like to submit and have included in the hearings.

Mr. DAVIS. Without objection it will be included in the record at this point.

(The prepared statement of Mr. Chenoweth is as follows:)

STATEMENT OF J. EDGAR CHENOWETH, MEMBER OF CONGRESS, THIRD DISTRICT, COLORADO

Mr. Chairman and members of the committee, I appreciate this opportunity to appear before you in support of the Purgatoire River project at Trinidad, Colo. This project has a favorable report from the Army engineers, as contained in House Document No. 325, 84th Congress, 2d session.

I have been sponsoring this project for many years. I might state that Trinidad is my hometown and I have personal knowledge of the deperate need for this project. As a small boy I can remember the disastrous flood of 1904, which was the first of several devastating floods to strike Trinidad.

The city of Trindad is located in southeastern Colorado and is the county seat of Las Animas County. The Purgatoire (Picket Wire) River rises west of Trinidad in the Sangre de Cristo Range of the Rocy Mountains. The river flows eastward until it joint the Arkansas River east of the city of Las Animas, Colo., some 100 miles away.

The 1904 flood was the first major flood of record on the Purgatoire River. I understand that major floods occurred in 1866, 1883, and 1886. However, there is no record of the same. Since 1904 there have been three major floods at Trinidad. These occurred on July 22, 1925, April 23, 1942, and just last year on May 19, 1955.

These floods caused heavy damage to property in and near the city of Trinidad, and also to valuable farmland below the city. Trinidad is an important transportation center and is located on the main line of the Santa Fe Railroad. Last year the main line of this railroad was tied up for several days until the damages could be repaired. These repairs were not completed for several weeks. The Colorado & Southern Railway, which operates between Denver and Fort Worth, also suffered heavy damages and traffic was suspended for a period after the flood. Trindad is also served by the Denver & Rio Grande Western Railroad.

The city of Trinidad is located on United States Highways Nos. 85 and 87 running north and south. This is the main north and south highway through Colorado and is of great military importance. This highway is included in the Interstate Highway System contained in the new highway bill passed by the House last week. Trinidad is also located on United States Highway No. 350 running east to La Junta where it joints United States Highway No. 50. These recurring floods have washed out roads, bridges, and approaches, resulting in the suspension of traffic over these highways for a period of several days. In times of emergency this would greatly impair our national defense.

This is a flood-control project designed to protect the city of Trinidad from these recurring floods. In addition to the flood-control features, irrigation bene-

fits are also provided. The total cost of the project is $17 million, of which $8,268,000 is charge to flood control and $8,732,000 to irrigation.

The project as now recommended by the Army engineers provides for the construction of an earth dam west of Trinidad approximately 208 feet in height above the streambed. This reservoir will have a total storage capacity of 140,700 acre-feet, which will be apportioned as follows:

	Acre-feet
Flood control	46,700
Irrigation	55,000
Sediment retention	39,000

This project has been under study by the Army engineers for many years. The first hearing was held in Trinidad on September 8, 1937. As a result of these studies the engineers first recommended a channel-improvement project through the city of Trinidad as contained in House Document 387, 78th Congress, 2d session. This project was authorized by Congress in Public Law 534, 78th Congress, 2d session, which was approved on December 22, 1944.

This channel project was never constructed and no appropriation was ever made for the same. It was necessary for the city of Trinidad to provide rights-of-way and to assume certain financial obligations for the operation and maintenance of the project. No action was taken by the city of Trinidad and nothing was done to perfect this project.

There is a valuable irrigated section below the city of Trinidad, consisting of some 19,500 acres, which is known as the Sun Flower Valley. A number of private ditch companies distribute water to these farms. These irrigators were concerned over the channel project and expressed the fear that if such project was constructed, subsequent floods would do great damage to their diversion structures because the water would flow through the channel in Trinidad with great force. They urged that efforts be made to work out a dam above Trinidad, which in addition to protecting the city of Trinidad from flood damage would also provide supplemental water for irrigation.

The Army engineers held a meeting at Trinidad in December 1950, which was attended by representatives of all of the water agencies in the State of Colorado, as well as the Bureau of Reclamation. At that time it was decided to reconsider the possibility of constructing a dam above Trinidad. The engineers made another survey and compiled new data on this dam. The result is the project which is before the committee today in which the engineers recommend that a dam be constructed in lieu of the channel project.

The favorable report on this project was submitted to the Secretary of the Army on July 22, 1954. On March 30, 1955, I introduced H. R. 5362, a bill authorizing the construction of this dam as recommended by the Chief of Army Engineers. Before hearings could be held on my bill another disastrous flood occurred on May 19, 1955, which caused property damage in the amount of some $2 million. As a result of this flood all of the irrigation structures below the city of Trinidad were completely destroyed, which caused heavy financial losses to the ditch companies. The flood also washed away many acres of valuable farmland.

This is a feasible project and offers the best possible solution to the serious flood problem which exists at Trinidad. The people of the city are intensely interested in this project, as you will be informed by the mayor, Dr. James E. Donnelly, and other witnesses. Local interests will be required to contribute toward the first cost allocated to flood control, an amount estimated at $372,000. A conservancy district will be organized and a contract executed to repay the irrigation costs as provided by Federal reclamation laws.

Colorado and Kansas are the only States affected by this project. This project has the approval of the Colorado Water Conservation Board, which agency speaks officially for the State on all water matters. The project has the approval of the State of Kansas as contained in a letter from Gov. Fred Hall under date of July 8, 1955.

This project also has the approval of the Arkansas River Compact Administration, which has the responsibility of carrying out the terms of the Colorado-Kansas water compact on the Arkansas River as approved by Congress in 1949. This agency regulates the discharge of the water stored in John Martin Reservoir in Colorado, which water is divided between the water users of Kansas and Colorado according to the terms of the compact. This administration on July 12, 1955, at a meeting held in Colorado Springs, Colo., adopted the following motion:

"That the Arkansas River Compact Administration approves the flood-control project on the Purgatoire River subject to an operating procedure to be approved by the affected water users in Colorado and Kansas, the State of Kansas and the administration."

The principal industries of the Trinidad area are coal mining, agriculture, mercantile, and manufacturing. The coal which is mined in this area is used principally by the Colorado Fuel & Iron Corp. in its steel plant at Pueblo. When traffic is suspended over the railroad lines in Trinidad, it is impossible to deliver this coal to the Pueblo plant.

The business and industrial areas of Trinidad, as well as a portion of the residential area, have been exposed to these damaging floods over the years. It is highly essential that this project be constructed at the earliest possible date in order to protect this valuable property. When these floods occur the damage is so extensive that there is a complete disruption of all business activities.

Farming and the production of livestock are important to the economy of this area. The land below Trinidad is highly productive when irrigated. However, the flow of the river is erratic and at certain seasons of the year there is not sufficient water in the river to take care of the decreed water rights. There are a number of private ditch companies in this area, all of which have expressed their interest in this project, and their desire to participate in the same.

I am anxious to impress upon the committee the fact that a serious flood problem now exists at Trinidad. After the 1904 flood, the city constructed a floodway through the city and erected concrete walls along the banks. The recurring floods over the years have practically destroyed these flood protection works. It was necessary after the flood in May last year for the Army engineers to work out an emergency bank protection project, which has just been completed. The construction of the proposed dam will afford adequate protection from any flood of record.

I have just received a wire from Mr. Fred G. Gurley, president of the Santa Fe Railway System, in support of this project. I have previously referred to the fact that the Santa Fe Railroad suffered heavy damages in the flood of May 1955, and that normal traffic was not restored on the main line of this railroad through Trinidad, Colo., for a period of several weeks. Mr. Gurley urges favorable action on this project and presents reasons why the same is necessary. Mr. Gurley's wire reads as follows:

MAY 4, 1956.

Hon. J. EDGAR CHENOWETH,
House Office Building, Washington, D. C.:

Word reaches me here where I am making a trip over the line to the effect that Flood Control Subcommittee of the House Committee on Public Works has scheduled hearings beginning today on proposed dam and flood-control project on the Purgatoire River above Trinidad. On behalf of the Santa Fe Railway System I want to urge that this project be given favorable consideration by Flood Control Committee. Not only will construction of dam prevent further flood damage in that area but understanding is that irrigation features which are included in recommendation of Army engineers will be of substantial benefit to that area. I hope, therefore, that Flood Control Subcommittee will take favorable action on this project. It is fair to point out that this water-control project would undoubtedly be somewhat beneficial to our railroad in preventing damage we have experienced in the past. We will be grateful for any protection thus afforded us, but I would like to stress that my message of support for this project is directed to the benefits of the community at large as sharply distinguished from the incidental benefit to our own railroad. Kind regards.

FRED G. GURLEY,
President, A. T. & S. F. Railway, Phoenix.

This project is before the committee today after exhaustive study and investigation, covering a period of almost 20 years. I want to commend the Army engineers on the splendid work they have done in working out this project. I also wish to commend the Bureau of Reclamation for their fine cooperation in furnishing the data on the agricultural benefits. Both agencies have worked closely together at all times to make this favorable report possible.

I want to again thank the committee for including the Purgatoire River project in these hearings. I sincerely hope that favorable action will be taken on this

project and that it will be authorized this year. I assume that an omnibus flood control bill will be prepared to include the flood-control projects which will be approved by the committee. I hope this project will be included in this bill. Otherwise I urge the committee to report my bill, H. R. 5362, authorizing this project.

This project is of great importance to the people of Trinidad and surrounding area. I am sure they would want me to also express their appreciation for your favorable consideration. Thank you very much, Mr. Chairman, for your courtesies today.

Mr. CHENOWETH. I know the committee is pressed for time and has been hearing witnesses on a large number of projects, so we will be just as brief as we can.

I do want to say this, Mr. Chairman: This is a project which has been under study and consideration for a period of about 20 years. I believe the first hearing was held by the Army engineers in Trinidad in 1937, and since that time there has been a continuous study and review of the same.

As has been said, the Army engineers in 1944 reported favorably on a project calling for channel improvements through the city of Trinidad. The Government would put up about $1 million and the city would contribute about $126,000. The project was never accepted by the city and nothing was ever done to perfect the same largely because of the attitude of the irrigators below the city of Trinidad, There are some 19,500 acres involved, and a number of ditch companies. This is one of the oldest and most productive irrigated areas in the State and is known as the Sunflower Valley. The irrigators feared that the water would rush through Trinidad so rapidly that it would take out all of their headgates and irrigation structures. They expressed strong opposition and as a result nothing was done. They said, "Why not take another look at this project and see if you can build a dam up the river?" which I might state was the original intention of those who first suggested the project. The irrigators said, "Why not see if you can work out a project for a dam above Trinidad, so you cannot only give protection to the city of Trinidad, but give us some water for irrigation?" There are some 19,500 acres of irrigated land below Trinidad. No new land will be involved in this project.

So the engineers now have this project before you with a favorable report. It is a multiple-purpose project and the cost is divided almost evenly between flood control and irrigation.

The city of Trinidad is going to make a cash contribution of about $372,000. The irrigators will have to assume responsibility for repayment of something over $8 million, the amount charged to irrigation. A conservancy district will be formed which will enter into a contract with the Federal Government for the payment of the costs which are reimbursable.

We have the mayor of Trinidad with us and also a very prominent businessman, who is a member of the city council. They will explain the desperate need for this project.

I want to say that I think there is much more interest in this project now than in the past, due in part to the disastrous flood last May, just a year ago now. You will see the pictures of this flood shortly, which

will give you a better idea of the dangers to which the city of Trinidad is exposed.

The question was asked about possible opposition. I think there is no organized opposition. I do not know of any particular opposition to the project. The people of the city of Trinidad recognize the fact that they are going to have to do something to protect themselves from these recurring floods, otherwise, their property will be worth nothing, and they will not be able to continue in business. The irrigators below the city of Trinidad had all of their diversion structures washed away in the flood of last year.

Mr. DEMPSEY. Did not civil defense have to move in there?

Mr. CHENOWETH. I am glad you mentioned that, Mr. Dempsey. The Army engineers worked out an emergency flood protection project in the city of Trinidad and put up $50,000. The civil-defense people put up something like $115,000. That project was just completed and provides bank protection through the city of Trinidad.

After the 1904 flood the city of Trinidad built some concrete walls along the banks to protect the adjoining property. In 1942 we had a very serious flood, almost as big as the one last year, which practically demolished these concrete walls. The flood last year finished the job. So it was necessary to go in and clean out the channel and remove these old walls, and build a new bank-protection works, in order to protect the water lines and other public property in Trinidad. This has now been accomplished.

Mr. Chairman, that is briefly the picture. I will not go into further details, but I cannot overemphasize the importance of this project to the city of Trinidad. Words are inadequate for me to express to you properly the interest which is now being manifested in this project. The people are determined to work out some permanent solution to the flood-control problem now facing the city of Trinidad.

Again, Mr. Chairman, I cannot overstate the seriousness of this problem, and the necessity for this project.

Mr. Chairman, I would like now to present Dr. James E. Donnelly, the mayor of Trinidad. Dr. Donnelly is one of our very prominent physicians and surgeons. At the present time he is mayor of the city of Trinidad. It is the second time he has had the honor of being mayor of our city. He has been very active in promoting this project and is president of the Purgatoire River Water Association, which is a recently formed nonprofit organization supporting this project. Mayor Donnelly has done all he could to promote this project. He has a prepared statement which has been submitted to you for printing in the record and he will not take the time to read it. He does want to make a few brief observations, Mr. Chairman.

I am happy to present Dr. James Donnelly, mayor of Trinidad.

Mr. DAVIS. Thank you.

I have listened, and I am sure the rest of us have listened, with very great interest to your statement, Mr. Chenoweth. I am glad that you could be here, and I thank you for your presenting Dr. Donnelly to us.

Is there anything that you want to say now in further support of the statement which you have submitted, which will be made a part of the record at this point, Dr. Donnelly? If there is, we will be glad to hear from you.

project on the Purgatoire River through the city of Trindad would accrue benefits

STATEMENT OF DR. JAMES E. DONNELLY, MAYOR OF THE CITY OF TRINIDAD, COLO.

(The prepared statement of Mayor Donnelly is as follows:)

STATEMENT OF DR. JAMES E. DONNELLY, MAYOR OF THE CITY OF TRINIDAD, COLO., AND PRESIDENT OF THE PURGATOIRE RIVER WATER ASSOCIATION

Subject: Discussion and reasons for the construction of a multipurpose dam above the city of Trinidad situated on the Purgatoire "Picketwire" River

The city of Trinidad, Colo., is located in southern Colorado near the northern New Mexico border. Its geographical situation is such that the city itself lies in a valley surrounded by foothills of the eastern slope of the Great Rocky Mountains, commonly known as the Continental Divide. The Continental Divide is approximately 40 miles west of the city of Trinidad, known as the Sangre de Cristo Range or more definitely Culabra Range with peaks up to 14,000 feet in elevation. To the east and north of the city of Trinidad is a rolling plains area with an elevation of approximately 5,700 feet 12 miles northeast of the city of Trinidad.

The city of Trinidad was built on the Purgatoire River on the Old Santa Fe Trail around 1860 or 1865. The headwaters of this river arise in the rugged mountainous terrain on the Sangre de Cristo Range. A natural watershed basin above the proposed dam site is naturally formed by various tributaries from mountains ranging from 14,000 feet to a 7,500-foot drop on the northern boundary in about 30 miles. The southern boundary of this basin ranges from an average of a 13,000-foot elevation to an 8,000-foot elevation in 45 miles. There are 800 square miles of vertical watershed in this natural basin. It is, therefore, not very difficult to understand why the citizens of Trinidad live in great fear of devastating floods for the reason that any unusual precipitation sends a rugged fast-moving torrent down the Purgatoire River being fed by the many tributaries from both the southern and northern slopes of the basin.

Stability of the economy of the city of Trinidad depends on coal mining, agriculture, farming, and ranching. The agriculture and farming area extends from the mountainous country west along both sides of the river to the rolling plains northeast of Trinidad. The irrigated lands below a proposed dam site amount to approximately 19,500 acres almost in its entirety north and east of the city of Trinidad as previously stated at an elevation of approximately 5,700 feet. The Purgatoire River Channel in the headwater reaches upstream has gradients of several hundred feet per mile to Weston, Colo., where the slopes are in excess of 50 feet per mile to the vicinity of Long Canyon. From there through the city of Trinidad and past the farming area the ranges are from 50 to 20 feet per mile. This channel varies in width from a few hundred feet to three-quarters of a mile. The natural basin formed by the mountains west of Trinidad has a maximum of approximately 25 miles in width. The river channel has been estimated to carry 15,000 second feet of water. As the city of Trinidad between 1880 and 1910 had most of its growth, the citizens constructed six steel bridges in the city limits for river crossings. Historical data reveals that 2 bridges were lost in the 1904 flood and were replaced with 1 large concrete structure on Commercial Street in 1905. Since that time raging torrents have taken the toll of all of these bridges except one steel bridge on Animas Street and the concrete structure on Commercial Street. Retaining walls, during the years, were constructed of concrete to protect the business district of this city. These likewise have become inadequate or have toppled into the river and disappeared as did the bridges or have been replaced by only temporary structures of woodpiling and rock because of the financial inadequacies of the citizens of this community to cope with such devastating torrents and increasing magnitude of flood stages during the more recent years. The last payment on the bridge construction was made in 1948. It is easy to see then that the citizens of our community had been paying bond and interest on bridges that had vanished and had become so-called dead horses.

Army engineers were authorized by Congress in 1936 and 1938 to make studies on flood control. Such a study was authorized by the Chief of Engineers in August 1938 for the Purgatoire River and even though reservoirs investigated for flood control and other purposes on the Purgatoire and its tributaries were economically feasible, the district engineer found that a channel improvement

project on the Purgatoire River through the city of Trindad would accrue benefits only slightly less than the estimated annual charges and since important intangible benefits involving the security of the community and nationally important transportation facilities would also accrue, it was concluded that the channel improvement was more justified. This project was authorized and approved by Congress December 22, 1944.

There are 5 major floods with historical data available: September 30, 1904, July 22, 1925, April 23, 1942, August 2, 1950, and May 19, 1955.

The maximum reported peak discharge of 45,400 cubic feet per second occurred in 1904. The oldtimers of this community, who not only witnessed the 1904 flood but the 1955 flood, maintain that the peak was far greater in 1955. There are 8 records available since 1921 which reveal estimated peaks of floods which have exceeded the existing channel 15,000 cubic feet per second. These peak discharges range from 18,000 cubic feet per second to at least an equal or if not to exceed the 45,400 cubic feet per second in 1904. In addition to the 8 floods mentioned above, 13 peak discharges occurred in the category of 10,000 to 15,000 cubic feet per second and 30 in the category of 5,000 to 10,000 cubic feet per second.

The property within the flood plain of the Purgatoire is both urban and rural. The urban portion of the flooded area consists of property in Trinidad classified as residential, business, railroad, and industrial properties. The rural area of the flood plain is composed almost exclusively of agricultural property and transportation facilities. Damages from floods have been classified as tangible and intangible. Tangible damages are those which can be expressed in monetary terms and have been compiled as direct and indirect damages. Intangible damages are those which are real, but not susceptible of evaluation. We have, however, as a city not been able to convince ourselves that when a farmer, for example, loses 10 acres of rich farmland to become sand and gravel river bottom, that such a loss should be considered as intangible. Just the cost of the land could never replace the future years of valuable crops. Even with the prevailing formula, these damages have been very great to the citizens of this community.

During the years many diversion dams of all types of construction have been placed on this river for irrigation purposes to the aforementioned 19,500 acres of farmland. With the velocity and volume of the many floods, it has been impossible for the various ditch companies to cope with the loss of these diversion dams. There is no doubt that the economic stability of this community could ever be made possible without some method of impounding these raging torrents. The farmers of our community cannot even approach 50 percent stabilization when they cannot be sure of crops because of the lack of water when needed or the lack of water because their diversion facilities have been washed away. Neither can they approach stabilization when they are forced to replace and repair diversion dams so often without assurance of crops. They cannot afford such repairs. It is an absolute impossibility for the farmers composing the various ditch companies to ever finance diversion dams adequately constructed to resist forces resulting from the high velocity and great volume of the aforementioned raging torrents. One who is not familiar with the antics of the Purgatoire River would never believe the potential devastation without seeing this river at flood peak. The velocity of this river through the city of Trinidad from Long Canyon west to the San Francisco Creek beyond the irrigated farmlands east varies between 7 and 12 miles per hour, depending on the volume and the duration of the peak dischages. The velocity above Long Canyon has been estimated to be much higher and in some places nearly double. It is little wonder then that this riverbed is changed with each peak discharge subsequently creating a greater potential menace to the inhabitants of this community. As a result of this first-hand information, the city council in 1948 and 1949, during my first term as mayor, began to investigate means of flood protection for the urban and rural areas near Trinidad. We knew that because of our geographic situation that during the months of April, May, and June the runoff of water in the Purgatoire River from melting snow and spring rains to be quite extensive. We further knew that during the months from mid-July on, the farmers in our valley were in dire need of water for irrigation. We knew this water could not be had in the average year because the runoff had already occurred and the water had passed without full benefit to the locality. Investigation later, furthermore, revealed that this water is dissipated before it can be of benefit to people very much further down the river. We also knew that we had a very serious problem which confronted the city of Trinidad and which also involved the farmers living below. The problem was that the already described flash

floods were of such tremendous volume that life and property in Trinidad was becoming more unsafe each year. We know that the channel through the city was in such unsafe condition that the inhabitants lived in dire fear that the entire city's business district could be wiped out with floods of such magnitude of that of 1942.

As a city, we firmly believed that our boundaries did not end with imaginary lines, but also included the trade areas about us. We, as a city council, did not oppose the authorized channel project, but we did not believe it to be our final answer. We did not think that the city should have a channel which would keep floodwater within the banks and dump this onrushing water on to the farmers below us in such a manner as to give them gross damage from loss of farmland, diversion dams, and even life. We did not believe it our duty to constrict the saving of property and life only in the city of Trinidad by such a channel through the city, while jeopardizing, at the same time, those people living beyond town. We did and we do now, however, believe that the answer would be to impound these raging torrents to the extent that they could be used more profitably by the farmers and, at the same time, doing away with the danger of devastating floods, not only to the people of Trinidad, but to the people living below. We, therefore, began to seek feasibility of a multipurpose dam as an answer to all of our problems. We did not believe that all of the factors which enter into the feasibility of such a project had been previously given the proper consideration. As a result of this philosophy many years of hard work and study have gone into the engineers report which is feasible and an absolute essential for the people in this area. The loss of crop production mounts with each passing year with a similar increase in flood hazard. Huge amounts have been spent in the past to repair flood damage and today we find repairs yet to be made.

On May 19, 1955, there occurred in the Purgatoire River in Trinidad a flood peak discharge estimated to be in excess of 45,000 cubic feet per second, an enduring flood stage for almost 24 hours. High water during the period swept away 5 homes, inundated 30 city blocks, flooded 125 houses and business establishments with 1 to 4 feet of water, and severely damaged 3 bridges. A newly constructed State highway bridge was nearly completely lost and because of the great volume of water a new section lengthening this bridge was put in place during the repair of the damaged bridge. A 50-foot approach to a 434-foot bridge, recently acquired by the city from the State highway department was lost, which in all probability saved the entire structure which again reveals the devastating force that this river is capable of producing. Engineers estimated that the Commercial Street Bridge, a concrete structure built in 1905, had four times more water going past it than the bridge could accommodate. Long sections of highway and railroad track were washed away. All of this damage in the urban area was conservatively estimated by engineers of the Army to be in excess of $1 million. Owing to the duration of the flood, and also because of the fact that a second rise to peak, or near peak, discharge followed a short recession, the flood-control works and riverbank throughout the city were left in extremely poor and vunerable condition. The danger from scouring was so acute that some 40 families along the north bank of the Boulevard section were forced to leave their homes. If it had not been for a well organized group of city administrators and the local National Guard, there would have been a high loss of life as flooding of homes was very rapid once the river was out of its banks. People—whole families—were removed by the local National Guard trucks alerted and ready to move into flooded areas. Trucks owned by the city from all departments including the fire department were used to evacuate flooding areas. The city police and the State highway patrol were being directed from the city police radio. The fire chief and I together kept close observation at various points from 11 p. m. until 3 a. m., when the decision was made by us to alert the entire community with the fire department siren. Thirty minutes later the river began to leave its banks at the Santa Fe Depot. As day began to break, a crest suddenly came over the riverbank west of the new highway bridge and within 15 minutes had engulfed 40 to 50 homes with water 1 to 4 feet deep and rolling 6 or 7 miles an hour. Had we not been right at the location with all equipment ready to move, many lives would have been lost as people were pulled from the cold muddy swirling waters, some even with "babes in arms," by a wonderful group of good American people. In seemingly no time the city was cut in half as far as communication was concerned. The Animas Street Bridge was closed as being unsafe with such a volume of water.

Streets leading to the new State highway bridge and to the Commercial Street Bridge were covered by the expanded river to a depth of 5 feet. The approach to the Linden Avenue Bridge had been gone since 2 a. m. At this place an automobile came over the Linden Avenue Bridge and was driven into the dark swirling torrents before the driver could be warned. To this day his body has never been found, even though his battered automobile was found several days later, miles down the river. The Colorado & Southern Railway constructed a bridge 2½ times longer than that lost in the 1942 flood, but even this was not adequate as they lost an additional 50 feet of approach on the northern end of the bridge. This bridge was probably saved by the railroad company because they placed several fully loaded gondola cars on the structure and left them there for additional weight. With the long duration of this great volume of water, the people of Trinidad realized that they were really fortunate that 3 to 4 feet of snow fell above Weston, Colo., in the high country instead of rain. There is no doubt in my mind about what the outcome would have been if this snow hadn't run off a little more gradually than the same amount of precipitation by rain. Can there be any doubt in any mind why we want to dam the Purgatoire?

Since this flood, temporary measures on an emergency basis have been finished by the Corps of Engineers.

The Santa Fe Railway was unable to resume normal service for several weeks. The city of Trinidad happens to be on the Santa Fe main line from Chicago to Los Angeles.

Repairs of temporary nature have been completed with the exception of a Stonewall Street or Avenue levee. A multipurpose dam as purposed by the Corps of Engineers would be constructed on the basis of the greatest possible estimated precipitation above the purposed dam site or a structure capable of impounding 106,000 cublic feet per second. Impounding of such water would not materially deplete the John Martin Dam as has been shown by studies made on request by the Arkansas River compact. I should like, furthermore, to point out that even if there were a slight depletion the people receiving benefits from the John Martin Dam owe to the United States Government a moral obligation as the dam was built at no cost to the beneficiaries. The people in this community of Trinidad are cognizant of the dangers to them and their everlasting inability to economically stabilize themselves without the construction of this multipurpose dam. The entire population of this community united to form an organization called the Purgatoire Water Users Association, with the purpose of promulgating the effort to gain authorization by Congress for the construction of this multipurpose dam above the city of Trinidad. The second purpose of this voluntary organization is to aid in every way possible the formation of a conservancy district immediately after such authorization, so that there may be an entity with which the United States Government may make the necessary contracts. Without dwelling further on the flood damage in the city, we must attempt to find reasons why the farmers themselves would specifically benefit by such construction. As has been mentioned before they have suffered great loss of diversion facilities for irrigation. They have never had ditch construction properly built to take water from the Purgatoire River in great amounts because of the velocity of the river. Their ditches just could not handle such velocity. The Model diversion dam, as an example, was formerly about 300 feet in length and will now require a new diversion dam of 900 feet in length of the cheapest possible construction which will cost in excess of $50,000.

If the velocity of the river is too high now, what would the effect on diversion dams be if a funnel or channel were made through the city of Trinidad? We can readily understand, therefore, why the Model people are agreeable to transfer their storgae rights from the Model Reservoir east of Trinidad to the new multipurpose dam. None of the diversion dams were in proper condition either by new construction or repair to take water into the various ditches before the first week in July. We all realize then that the 1955 crops of the 19,500 acres of alfalfa and sugar beets were nearly a complete loss. How many times can the farmers in this community stand such complete losses and in addition repair and construct replacement diversion dams which have been lost by this devastating river? If these people are to survive and have a right to make a living in their chosen way of farming and ranching, then they must get some aid. As an exact corollary to the loss of the farmers has been the loss to the urban area with complete destruction of any protection for the business district of this city. The people who will be affected by the next flood of any such magnitude comparable to that less than 1 year ago, will be from all walks of life in the com-

munity. The property owners of homes and business establishments have their lifetime earnings involved. What insight can they possibly have except to close their eyes at night and, instead of counting sheep, see only a raging muddy torrent sweeping away everything for which they have worked. They know in their own hearts that as certainly as the sun will rise day after day, sooner or later, they will lose everything they own; as their property will tumble into this liquid monster and vanish. Their only prayer now is that God will save the lives of the people who live here.

In conclusion:

1. Geographically the velocity of flood peaks will never change because of the type of nearly vertical topography making up the river basin above Trinidad.
2. The city will eventually be demolished by these raging torrents which have unusual velocity at peak discharge.
3. The farmers and ranchers will never be able to make a living in this area when any money above a meager existence must be constantly drained back into repair and reconstruction of diversion dams.
4. Regulation of the river flow can be had and the flood menace to the city of Trinidad can be abrogated if a multipurpose dam which is feasible is constructed above the city of Trinidad.
5. The John Martin Dam will not be materially depleted.
6. The theme on which the Arkansas River pact was written of "Live and let live" will be strictly adhered to.
7. The people living in this community both urban and rural will have an opportunity to become economically stabilized.
8. The construction of this feasible dam is an absolute must for this community for its survival.

Mayor DONNELLY. Mr. Chairman and members of the committee. There are a few things I would like to point out very rapidly and quickly. I think we have to understand the topography and geography of this a little bit in order to understand why these floods are so devastating. The watershed above this proposed dam site is formed by various tributaries from mountains ranging from 14,000 feet to a 7,500-foot drop on the northern boundary in about 30 miles. The southern boundary of this basin ranges from an average of a 13,000-foot elevation to an 8,000-foot elevation in 45 miles.

Mr. Dempsey, I am sure, understands our problems in this part of the country.

This slope comes down from 14,000 feet and drops almost 7,000 feet in about 30 miles. On the southern slope it is about 45 miles in width. Therefore we have a vertical watershed in this basin of nearly 800 square miles.

To get back to the gradients of this, in the upper reaches it drops several hundred feet every mile. In western Colorado, which is in the upper parts of the river, from West to Long Canyon, and drops about 50 feet a mile from Long Canyon down to Trinidad, and on the Plains 50 to 20 feet. So we have a river which runs, when it has a peak discharge, 7 to 12 miles an hour. Oldtimers there tell me the 1955 flood was just as big as the 1904, if not bigger. We had a lot of damage done during this flood last year. I will not go into the detail of how much damage, and so on, but we do have a river through the city of Trinidad which is capable of taking care of 15,000 cubic feet per second. We have had many floods in excess of that, as my report will show.

Getting down to the irrigation part of it, the first thing we want to know as citizens of Trinidad is why farmers would want this multiple-purpose dam. When we get down to it we find that the farmers in this 19,500 acres of irrigated land of alfalfa and sugar

beets, when the water is up—and they have water rights to it—have to close their gates because the ditches were not constructed to take that kind of a velocity. So actually that water is lost to them.

The Model Dam is over in this vicinity of Trinidad. They have a storage of 1,000 acre-feet. That will add to the storage of this dam here, and it is all part of the feasibility of this, because we can see the reason for that. The people of Trinidad are agreeable to paying the $372,000. We will raise it by a bond issue. We recently formed the Purgatoire Water Users' Association to promulgate the authorization of this and furthermore to aid in getting conservancy districts formed, if there is an authorization. If there is an authorization, we will get that immediately.

Of course, I have been over the actual engineering reports many times throughout the years, but this is a feasible project. We went before the Colorado-Kansas Water compact a couple of different times. There is no appreciable loss to John Martin Dam and we would live strictly by what the compact was formed on, and that was the basis of to live and let live, as General Kramer said at the time they took the vote on it last July.

Everybody is well agreed to it. We know the geography will not change here absolutely and these floods will keep coming unless we do something about it.

I have an aerial photograph that I thought you would like to see, as to what will happen if we do not do something with it. In the city of Trinidad you can see the State highway department built a new bridge here. This flood last year took one span of this bridge and since that time they have put in a new one.

There is a cloverleaf which was completely taken out and they put some jetties in here to save property here. They are attaching them to this bank, but I think it is going to go right through them. There is no doubt of that because the velocity of this river is terrific.

I would like to submit my statement. Also I have several telegrams from people at home which show their concern over this. The only other thing I want to say is, as I told you, geography will not change and we believe the city will eventually be demolished unless we do something about it. We know a dam can be put here and it is feasible and will take care of the people for irrigation, and as far as flood control is concerned also for the people of Trinidad. We know the John Martin Dam is not going to be improved in the way of benefits except in one thing, and that is the sedimentation of this river is very high when it is rolling. Engineers estimated last time I talked to the engineers out at Albuquerque that maybe 10 or 15 years of life could be added on to the John Martin Dam if this dam were completed.

Mr. DAVIS. Are there any questions of Dr. Donnelly?

Mr. ROGERS. What is the population of Trinidad, Mayor?

Mayor DONNELLY. 13,000.

Mr. ROGERS. What is the surrounding population of the area that would be affected?

Mayor DONNELLY. I would say in the neighborhood of 25,000.

Mr. ROGERS. What was the estimate of damage last year?

Mayor DONNELLY. $2 million. Roughly $1 million urban and $1 million rural.

Mr. ROGERS. And this project that has just been built for protective purposes runs through the city?

Mayor DONNELLY. Yes, sir.

Mr. ROGERS. Do you think it will handle the situation in the future?

Mayor DONNELLY. I do not think so. I am a little skeptical about it. I do not like to bite the hand that feeds me, but at the same time, it is a pretty rough river and I do not think it will stand up. I may be wrong, and I hope I am.

Mr. ROGERS. Thank you very much, Mr. Chairman.

Mr. DAVIS. Thank you, Mayor Donnelly.

Mr. Chenoweth, do you have another witness?

Mr. CHENOWETH. We have with us today, Mr. Chairman, Mr. S. W. Azar, past president of the chamber of commerce of Trinidad, Colo., one of our very prominent businessmen, and a member of the city council. Mr. Azar thinks he can best serve the committee by showing the pictures, which he will do shortly. I believe Mayor Donnelly obtained permission to include his statement, and also the wires he received this morning?

Mr. DAVIS. We will not make that part of the record, but we will include them as extraneous matter in connection with the hearing.

Mr. CHENOWETH. Thank you, Mr. Chairman.

I have three statements here from residents of the area, representing organizations, which I would like to obtain permission to include as a part of the hearing. The first is from Philip Ahlschwede, president of the Trinidad-Las Animas County Chamber of Commerce, talking about the need for the project.

Also I have a statement from Mr. Charles Wilkinson, Jr., secretary and manager of the Model and John Flood Ditch Cos., located at Trinidad, Colo.

The third statement is one signed by Harold Winter for Baca joint ditches; Frank Cappellucci for enlarged South Side ditch; Dean Butler for LeSage ditch; A. E. Latuda for Chilili ditch; and Ross Inman for El Moro ditch. All of these companies are affected by this project and they are very much concerned.

Mr. Chairman, rather than bringing these witnesses this long distance, I would like to have permission to have their statements included.

Mr. DAVIS. If you will hand those to Mr. McGann so the reporter can get the spelling of the names, that would be appreciated.

Mr. CHENOWETH. Yes, sir. The names are all on there, Mr. Chairman.

Mr. DAVIS. Without objection, they will be made a part of the record.

(The documents referred to are as follows:)

STATEMENT OF THE TRINIDAD-LAS ANIMAS COUNTY CHAMBER OF COMMERCE

The membership of the Trinidad-Las Animas County Chamber of Commerce respectfully submits this statement to show cause, and the necessity of having the Purgatoire (Picketwire) River, Colorado flood control and irrigation by construction, maintenance, and operation by agencies of the United States Government, of a dam and reservoir above Trinidad, Colo.

The flood control for the health, preservation, and protection of Trinidad citizens, and the conservation of flood flows for irrigation use.

Historically speaking: This area is subject to destructive floods within the area under consideration; damage is largely concentrated in the 39-mile reach between mile 161, about 4 miles above Trinidad, and San Francisco Creek.

Since 1886, eight major and many lesser floods have occurred.

The most serious flood problem area on the Purgatoire River is the city of Trinidad. As for economic justification for the project, estimated value of property that would be inundated by a recurrence of a flood such as in 1904, 1942, and 1955, is in excess of $8,801,000.

The locally constructed floodway through Trinidad is inadequate to pass major floods; therefore, a more comprehensive plan is a must and the above-named project will do the necessary job.

With this reduced flood protection, the central business, commercial, and industrial areas of Trinidad, which have often suffered serious flood damage are more vulnerable than ever.

Service on vital transcontinental rail lines is subject to serious disruption during floods. Utility service of all kinds is disrupted, and that is not good for the health, welfare, and safety of the citizens of the city of Trinidad.

The economic life of Trinidad is based on coal production, farming, and ranching, and tourist trade. With the decline of coal production, the farming and ranching in this trade area is becoming increasingly important. Most of our crops are dryland crops with a limited amount of irrigation. With a serious loss to our rural area caused by uncontrolled floods, this seriously affects the economic structure of Trinidad.

The rural area cannot constantly repair the terrific loss due to the floodwaters.

The property within the flood plain of the Purgatoire River is both urban and rural. The urban portion of the flooded area consists of property in Trinidad, classified as residential, business, railroad, and industrial properties.

The estimated value of the property in this area is as follows:

Transportation	$5,700,000
State and county highways	202,000
Telegraph, telephone, power, and gas lines	127,000
Urban property:	
Residential	250,000
Commercial	1,340,000
Industrial	284,000
Municipal	337,000

These damages are of the tangible damages, and, in addition, there is the intangible damages which are real but not susceptible of evaluation.

The high velocities of flood discharges through the city of Trinidad create two serious problems: It demolishes all light structures in their paths, and they also cause extensive bank caving.

This endangers the Atchison, Topeka & Santa Fe tracks and depot, and the bridge of the Colorado & Southern Railroad.

With the flood control, Trinidad would benefit by no further loss from floods—a benefit of about $225,000 annually. There would be excellent opportunity for future development industrywise. Land values would increase about $433,000, and for the rural area there would be irrigation benefits amounting to about $290,000 annually.

There would be benefits to the fish and wildlife as well as recreational benefits. A single picnic area near the reservoir would produce annual benefits of about $12,000. There are secondary benefits that all would enjoy in this area.

The tangible benefits would total about $590,000 annually, while the intangible are not susceptible to monetary evaluation, but are most important, such as prevention of the loss of human life, enhancement of the general welfare and security of the people, improvement of sanitation and protection against epidemics.

Agriculture in the Trinidad trade area is a $20 million industry, and is a vital factor in our economic structure. Without continued assurance of this multiple-purpose dam, the farmers in this area cannot survive the devastating floodwaters of the Purgatoire River when it goes on its periodic rampage.

Local interest will maintain the channel of the Purgatoire River through the city of Trinidad, Colo., and will cooperate fully with the agencies involved in the project.

STATEMENT OF THE MODEL LAND AND IRRIGATION CO.

Fundamentally, there are two reasons why stockholders in the Model Land & Irrigation Co. and in the John Flood Ditch Co. desire to have a flood-control and irrigation storage dam built across the Purgatoire River west of Trinidad. These are as follows:

(*a*) Construction of the dam will minimize greatly the danger of flood damage to diversion dams on the river.

The Model Land & Irrigation Co. diversion dam was destroyed by the flood of 1942. It was rebuilt at a cost of $20,000. In May of 1955, this replacement dam was destroyed and damage to the streambank was so extensive that the structure now under construction to replace the dam built in 1942 will cost approximately $50,000.

In addition to the diversion dam, the flood of 1955 took out the filling canal headgate, the house and machinery sheds near the headgate, and even the land on which the structures stood. Where once were 14 acres of rich soil, now lies riverbed gravel and sand. Replacement of the house, sheds and headgate structure will cost the Model Co. about $10,000.

The flood of 1942 washed away the John Flood Ditch diversion dam as well as the Model dam. Since that time, the John Flood Ditch Co. has diverted water from the Purgatoire River in to the ditch by means of the Model diversion and the first 2½ miles of the Model ditch. Replacement costs for the John Flood Ditch dam would amount to approximately the same as for the Model diversion now under construction.

(*b*) Construction of the Purgatoire Dam will provide a more reliable and usable supply of water for irrigation purposes.

The Model Co. depends to a large extent upon floodwater for its supply. The Model intake canal carries a maximum of about 300 cubic second-feet of water. At flood stage, the Purgatoire River flows past the Model intake canal headgate at the rate of 5,000 up to a peak of about 45,000 cubic second-feet, the maximum recorded during the flood of 1955. Most of the floodwaters are past and gone within a period of hours or a few days at most, with the result that the Model ditch is able to divert only a very small percentage of the available water. In fact, the Model reservoir has not been filled to capacity by water from the river in the past 10 years.

It should be noted that the Model reservoir once provided water for the irrigatiton of 20,000 acres of land on the Model irrigation tract. This acreage has been reduced to about 4,000 acres now under cultivation. Since the entire acreage to be supplied by the Purgatoire River reservoir will be limited to 19,000 acres, it will obviously be impossible to increase the irrigated land on the Model tract to the original amount. In fact, this is not expected or wanted. What is vitally needed on the Model tract is not a tremendous increase in the supply of water, but a more reliable supply of water, enabling farmers to plant crops with a decent chance of receiving enough water to raise and harvest a good crop.

It is anticipated that surplus water received by water users on the Model tract during the development period will be used, not to produce more cash crops, but to aid in starting the growth of perennial grasses and soil-building legumes for the pasturage of livestock, and for conservation purposes.

The John Flood Ditch will not be benefited to the same extent as the Model Co., since the water priorities of water users under the John Flood Ditch are of a comparatively early decree. However, to the extent that the supply of water is rendered more constant, the John Flood Ditch will benefit. After the flood of 1955, water users on the John Flood Ditch were without water for more than a month. Since irrigated land valuations under the John Flood Ditch are high, this represented a material financial loss to the farmers.

STATEMENT OF THE UNDERSIGNED IRRIGATION COMPANIES

We are hereby furnishing statement of the position of the undersigned ditch companies in Las Animas County who are affected by the issue of the construction of a dam on the Purgatoire River in Trinidad, and who are the senior appropriators of substantially all of the water from the Purgatoire River in water district No. 19 of the State of Colorado.

An exhaustive and detailed exposition of the value of that dam has been well stated in a letter from the Secretary of the Army to the Speaker of the House

of Representatives of the United States. We wish to add to the objective statistical facts contained therein, our urgent plea for relief from the distress wreaked upon our lands periodically, and with such frequent recurrence that the value of these lands which represent our patrimony, our life's work, and the future of our children are rapidly becoming valueless.

The seriousness of our plight is best illustrated by an example of the damage caused by the most recent flood on the Purgatoire River in May 1955. One ditch which served to irrigate acreage to supply the growing of alfalfa for two large cattle ranches suffered the loss of its dam. The cost of replacement of this dam will be in the vicinity of $60,000. There is no assurance that such a dam could withstand the onslaught of another flood similar to the one of May 1955. With these floods recurring every decade, it means an average capital loss to these ranchers of $6,000 per year, not to mention loss of crops, curtailment of cattle production, and expense of maintenance of the high-priced diversion dam. The water to be obtained by virtue of the irrigation provided by this ditch alone is the very life's blood for the two ranches involved, which represent an investment, including their cattle, that runs into seven figures.

Colorado being an arid State, is wholly dependent upon irrigation. The principal crop raised by the use of the water in this area is alfalfa used as cattlefeed by the ranchers owning the cattle ranches in this vicinity, crops and products, incidentally, which are not subsidized in any way by Federal or State agencies. Without the network of expensive diversion dams and ditches, this irrigation is impossible, yet we suffer the tragic spectacle, at least once each decade, of seeing our dams destroyed, what remains of them filled with siltation; our ditches washed away or silted; and the rich riverbed land washed away by the raging torrents. One farmer alone suffered a loss of 24 of his best acres in the last flood.

A conservative estimate of capital damage to ditches, dams, land and crop loss as the result of the 1955 flood was in excess of $1 million.

To us the construction of the proposed dam means simply the saving of our dams, our ditches, the preservation and assurance of continued use of our vested valuable water rights, freedom from indebtedness and insecurity, and it will give us the opportunity to earn a decent living on our own lands. The absence of a dam can mean but one thing—continuing disaster.

Mr. CHENOWETH. I think with the exception of showing the picture, this will conclude our presentation. Again I want to thank you for your courtesies and your interest in this project. I am sure that the people in this area would also want me to express their appreciation and gratitude to you.

Mr. DAVIS. Thank you for your cooperation this morning also, Mr. Chenoweth.

This picture will take about 15 minutes, so if the Army engineers wish to view it they may sit back here where they will have an opportunity to see.

(Whereupon the motion picture referred to was shown.)

Mr. DAVIS. Thank you. Our only feeling is we wish every Member of the House could see the picture.

Mayor DONNELLY. I think it demonstrates the need for this project.

Mr. DAVIS. Thank you very much, Mayor Donnelly. You and your Congressman have done a fine job here, and all of your associates also.

SALINE RIVER AND TRIBUTARIES, ILLINOIS

Mr. DAVIS. We will pass to the Saline River and tributaries project, because a member of this committee, Ken Gray, has been trying to get this project up here for several days.

This project is in House Document 316. Will Mr. Ware, representing the Corps of Engineers, come around and give us a picture of the Saline River project?

STATEMENT OF WALTER WARE, CORPS OF ENGINEERS

Mr. WARE. Mr. Chairman and members of the committee. The Saline River is a tributary to the Ohio River, located in southeastern Illinois, as indicated on the vicinity map. It enters the Ohio River near the town of Shawneetown.

The report is submitted in accordance with the resolutions of the Senate Public Works Committee dated March 9, 1948, to determine whether improvement for flood control and drainage and other related purposes was advisable at this time. In addition there are resolutions on Rector Creek, which is a tributary to the North Fork of the Saline River, namely, the House Flood Control Committee resolution dated July 5, 1946, and another one on July 15, 1947, which cover Rector Creek and the North Fork, and a later one in 1948 deleting the North Fork from that resolution. The report covers all of the resolutions.

There is one existing project constructed by the Federal Government at Harrisburg, located here, consisting of a levee and concrete flood wall, the necessary drainage facilities, and two pumping plants. The Federal cost of that project was $849,650, and the local cost was $20,000.

The local people have improved the stream channel in many parts of the basin, particularly in the upper tributaries. The Illinois Division of Waterway Construction has also accomplished some construction to clean out the major stream channels.

The problem in this area is the frequency of floods. They have two types of floods in this area. One is the backwater floods caused by high water in the Ohio River, which backs water up the Saline River in this same area that suffers from headwater floods. The solutions to the flood-control problem that have been studied and been determined to be feasible are only those which will take care of the headwater floods. However, I will mention the major floods that have occurred in 1937 and 1913, which were, of course, due to the high water on the Ohio River. In March 1935, the maximum headwater flood occurred which inundated 43,000 acres. However, the rather large damages are caused by moderate stages. For example, a moderate flood in July 1951, caused a flood damage of $238,000. From 5 to 7 floods occur annually as an average. Over a period of 22 years they had 97 headwater floods and 35 floods affected by backwater from the Ohio River, and 8 were backwater floods entirely. In other words, the backwater floods are less frequent than the headwater floods.

The solution to this problem as proposed is clearing and enlargement of the channels as shown on this map. We found that improving of the main stream below the junction of the North Fork would not be justified. It has a rather flat slope and is affected by the backwater of the Ohio River. In fact, the normal pool level in the Ohio River at Dam 250 on the Ohio backs up to mile 10 on the Saline. The proposed channel improvement extends up the main stream of the Saline River to the point where the Middle Fork and South Fork join to form the main stem. That is about 10 miles on the main stem of the Saline and we have 35 miles on the North Fork of the Saline River and 12 miles on the Middle Fork will be enlarged. The improvement on the South Fork is restricted to clearing and cleaning, as it was found not to be justified to enlarge the channel.

The cost of this proposed project is $6,618,000, of which the Federal cost would be $5,272,000, and the local cost $1,346,000. That local cost would include a cash contribution of 15 percent of the cost of construction, in addition to furnishing rights-of-way and the reconstruction of 2 secondary highway bridges.

The cash contribution is currently estimated at $930,000 based on a proportionate share of the project cost for one-half of the local benefits accruing to landowners through land enhancement.

The annual benefits are estimated at $386,000, of which two-thirds are due to the reduction of flood damage and one-third to the increased land use.

Mr. Gray asked a question as to the breakdown of local costs yesterday and I told him I would furnish those. The estimate of right-of-way costs to local interests, including the acquisition of land, is $128,500; the cost of utility alterations is $13,500; the highway bridge replacement is $274,000, or a total of $416,000 in addition to the cash contribution of $930,000.

The benefit-cost ratio is 1.35 to 1.

As to the attitude of local interests on this project, they are interested in it. Although they have protested the rather high local contribution of $930,000 they will make every effort to put the project into effect if it is authorized and funds become available.

As to the comments of other agencies, the Department of the Interior submitted comments from the Fish and Wildlife Service. However, the project will not have a major effect on fish and wildlife. The comments were that the heavy fishing pressure is down in the lower part where we do not propose any improvement, and due to pollution in the upstream area there is very little fishing in the upper tributaries.

The Department of Agriculture said the program did not conflict with the program of that Department.

The Bureau of the Budget had no objection to the submission of the report, although they made no commitments as to funds.

I believe that completes the presentation, Mr. Chairman. Are there any questions?

Mr. DAVIS. Thank you. I can summarize the whole thing as I see it. You have about 5 or 6 floods a year and in the last 22 years you had almost 100 damaging floods.

Mr. GRAY. 140, to be exact.

Mr. DAVIS. So the whole question is this: You have the need and you have an urgency for it, but our colleague on this committee, Brother Ken Gray, says that those people there simply cannot raise $937,000, or almost $1 million, as a local cash contribution over and above the other contributions they have to make, which are rather incidental. Is that not a pretty fair statement?

Mr. GRAY. That is exactly right.

Mr. Chairman, if I may, in supplementing your remarks, the reason I do not have any local witnesses here today is because there has been a great effort made down in my district since this report was first made to try to form a conservancy district, so we could have taxing powers with which to raise this money. They brought it to a referendum three times with the clear understanding that if the Congress approved this project at that time to the tune of $5 million with $1

million of local contribution, that they would be able to raise this money. Each time they voted the referendum down by tbout 2 to 1, which means there is no point in passing this resolution authorizing this project, or in the Appropriations Committee allowing the money, as long as the local people have to put up this $1 million local contribution.

There are many reasons why they voted it down. Even in the schools of Southern Illinois some have not been able to raise the taxes to pay the teachers. So when this was brought to a referendum it was voted down by a vote of better than 2 to 1 on three different occasions.

We do not have the taxing power, therefore, with which to raise this money.

I have passed out these colored sheets from the St. Louis Post-Dispatch. This clipping is only about 2 weeks old. I have marked on this map exactly where the Saline River runs through my congressional district. The reason why I brought it over is that it is an unbiased report of the true economic conditions in southern Illinois. Of course, it has no bearing on this project other than to show that we are suffering from economic chaos in southern Illinois, where we have 51,000 people receiving Government surplus food. I might add that this project is mostly rural. The engineers claim that the benefits to be derived are supposed to make for land enhancement on the part of the farmers. I might say in this immediate vicinity there has been a loss of 300 farms since 1952, which means the farmers are not faring well. I cannot understand where the Army engineers get their criteria for local participation, which makes them feel that the value of the land will be enhanced, when it is strictly a flood-control project all the way through and there will not be any acquisition of property except for a few feet to widen the channel.

Mr. DAVIS. If the project were completed it would just hold them. It would not enhance them any, but would more or less keep them in status quo.

Mr. GRAY. Not a bit, because most of this land is used for cattle raising. Some of it is used for cropland, but much of it is for cattle raising. It is not the best land. Anyone who knows anything about agriculture knows that. Downstate in southern Illinois it is predominantly coal mining and agriculture does not fare well, like it does in northern Illinois.

I asked the Corps of Engineers what kind of formula they used and they said it is done under criteria set down by the Bureau of the Budget on a percentage basis. However, I do not see how you can figure what will enhance land here in southern Illinois based on what it will do some other place, where the land is worth much more. This is just a question of dredging the Saline River and tributaries to let the waters out when we have heavy rains 5 to 7 times a year. I cannot see how it will enhance the value of the land. Even if it did, being frank with you, we are absolutely too poor to raise this money. So it would be futile for the Congress to go ahead and appropriate any money and say, "Here is your $4 million Federal contribution. You come up with your $1,300,000." We cannot do it. We had everyone come in and vote as to whether they thought the tax rolls would stand it. Although they want the project, they voted it down 2 to 1, and that is why I did

not have a witness come here today, because if it is recommended as it is we could not live up to it, even if the Congress passed it tomorrow.

As you can see from this sheet, economic conditions are rough there. We have lost 25,000 people in this district in the last 5 years. They have had to go to the cities to find work because of the closing of coal mines. As I said previously, in this area we have lost several hundred farms. The small farmer has had to sell out to his neighbor. The average acres per farm have increased, but the number of farms decreased, which means farming in southern Illinois is not profitable. It is all rural and the only argument the engineers could possibly have is that if we do not have these floods the farmers might put out a little more crop. But even those farming are not making any money. That is one thing.

Second, as I stated before, we just cannot raise the funds. I do not expect this committee to do anything more for me than they would for anyone else just because I happen to be a member of the committee. I would please ask them to consider this situation, though. There has been a precedent set down where local contributions were set up and the people were not able to raise their share, and the committee voted to set aside the local contribution. One of those was the Heart River in North Dakota, where the local contribution was to be about the same; namely, 15 percent. They could not raise the money there and Congress authorized them to do away with the land enhancement benefit part of the local contribution.

I would like to ask, not now, but in executive session, that the Committee seriously consider doing away with the local contribution for the reasons I have stated. As I say, I can cite some precedents. We possibly could raise the money for the bridges by working with the State highway division on that, and whatever it would take to get easements and rights-of-way, but as far as $900,000 for land enhancement is concerned, gentlemen of the committee, in the first place it is not there in the way of funds being available on the local level and, second, it is not justified in this proposal.

The Army engineers contend—and they do a wonderful job and I have a high respect for them—but they say that someone in the Bureau of the Budget laid down this criteria whereby if you spend this much then the local people should put up this much money. I think each situation is different. I do not think you can take 15 or 20 percent as a figure and say that the people in Illinois or Iowa will benefit by that much. I do not think you can do that. The local conditions in regard to the project should be taken into consideration on the overall basis, because in this case it is just the dredging of a river which will do away with floods. I do not think local contribution is any more justified than to say that an automobile is worth more money because a new road was put through your area. It is the same proposition.

I will not bore the committee with a long statement, but in executive session I would like to ask you to do away with this unjustified local contribution for the reasons I have stated; namely, first we cannot raise the funds and as proof of that we made an honest effort with three referendums in an appeal to the taxpayers to try to vote a conservancy district. Our taxing power has gone down. That is the situation we find ourselves in and that is substantiated by this unbiased reporter, who came in and wrote up this story.

I would like to ask the consideration of the committee in this matter when we go into executive session.

Mr. DAVIS. I think you made a splendid statement and in executive session we will go into this matter more thoroughly.

WEBER BASIN, UTAH

Mr. DAVIS. The next project is the Weber Basin, House Document 158. It is interesting to note that Mr. E. Weber of the Corps of Engineers is going to present it. Then, of course, we will hear from our colleague, Mr. Dixon, of Utah.

STATEMENT OF EUGENE W. WEBER, CORPS OF ENGINEERS—Resumed

Mr. WEBER. The Weber River is in northeast Utah and drains an area of 2,181 square miles in the Wasatch Mountains and drains into the Great Salt Lake near Ogden. The report, which is published as House Document 158 of the 84th Congress covers, in addition to the Weber River Basin, a small area known as the Willard Mountain area of 100 square miles, with a few flashy streams on which no plan is presented. So the proposed work covers only the Weber River Basin.

There is no Federal project for flood control in this basin, but about $100,000 was expended during the years 1945–52 for emergency work along the channels in snagging and clearing. There is, however, an authorized Federal irrigation project—a project of the Bureau of Reclamation—which provides for the inclusion of flood control storage on a nonreimbursable basis. For this storage the Corps of Engineers will, in accordance with section 7 of the 1944 Flood Control Act, prescribe the flood-control regulations. The Corps of Engineers and the Bureau of Reclamation will be coordinating their work in that respect as the detailed planning and construction of the irrigation project proceed.

The flood problem in this basin arises primarily from snowmelt conditions in the mountains each spring. There are damaging floods about once in 5 years on the average. The worst was in 1952 when $1,600,000 in damages were suffered. The average annual damages on the entire river are about $264,000.

The proposed solution to this problem is to utilize fully the opportunity for flood-control storage in these authorized reclamation reservoirs; namely, Pine View, Lost Creek, East Canyon, and Wanship Reservoirs. The existing locally controlled Echo Reservoir will also be utilized in the plan.

Utilizing various amounts up to 50,000 acre-feet of storage in each of these projects will have the effect of containing all floods of record within channel capacity, except in this stretch from Morgan to Ogden. Therefore the recommended plan calls for the improvement of that stretch of the river by the construction of dikes at intermittent points, and the clearing and snagging of the channel and improving it to the requisite capacity, which, along with the reservoirs provided under the irrigation plan, will give us an adequate channel.

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The cost of these 5 miles of levee and 12 miles of clearing and snagging and removal of the 2 small existing dams at Ogden would be $520,000 to the Federal Government, and $115,000 to non-Federal interests for lands and rights-of-way, and the usual conditions, including the removal of the dams at Ogden the total cost would be $635,000.

The benefits are $60,000 annually and the costs on an annual basis are $46,000, which gives a benefit-cost ratio of 1.3.

The comments of the Bureau of the Budget, the State of Utah, the Department of the Interior and Department of Agriculture are all that they have no objection and find no conflict in the plans. The comments of the Interior Department, of course, include concurrence in the fact that the reservoir program of the Bureau would fit in in the manner I have described.

I believe that is all, Mr. Chairman.

Mr. DAVIS. Are there any questions?

Mr. SMITH. Did the Governor of Utah approve this?

Mr. WEBER. Yes, sir. The State of Utah did approve and indicated they considered the project beneficial.

Mr. SCUDDER. Is not a part of the improved channel about where the Ogden waterworks is located? Is not the Ogden waterworks on that river?

Mr. WEBER. I am not aware of whether the Ogden waterworks is on the river or not.

Mr. DIXON. Will the gentleman yield? They come down Ogden canyon.

Mr. SCUDDER. That is the railroad right-of-way.

Mr. DIXON. From Pineview Dam down here. The Union Pacific Railroad comes down Weber Canyon and there are many small towns that will get their water supply south of here—23 towns—from the dam up here at Wanship and the East Canyon Dam, but not Ogden.

Mr. CRAMER. What is the nature of the flood damage? Is it largely agricultural and residential, or industrial, or what? I am referring to the $558,000 a year damage.

Mr. WEBER. The damages are pretty well distributed among agricultural damages all along the stream, and municipal and residential and industrial through the town of Morgan and the city of Ogden. I do not know the exact proportions, but we have that. I think there is a reasonably good distribution among all types of damage. This particular improvement will primarily cover the urban and suburban damage because the open reaches of the river will be protected by the reservoir work.

Mr. BALDWIN. I have a question.

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. I notice you have increased land use per year of $2,000 and then have total non-Federal cost of $105,000. Besides the increased land use what else is included in this non-Federal cost? Is it furnishing of easements and things of that kind?

Mr. WEBER. Yes, sir. The non-Federal work includes lands and rights-of-way—all utility and highway changes in the area, plus removal of two dams in this area in and near Ogden, which will no longer be needed after the regulation of the main irrigation plan is put into effect. These are small diversion dams which are now utilized in that area.

Mr. BALDWIN. How do the local people propose to provide this non-Federal contribution, or do you have knowledge of that?

Mr. WEBER. I do not believe at this stage we have determined how they would provide it, but the usual procedure is for them to organize in some appropriate manner.

Mr. BALDWIN. I will save my questions to direct to Mr. Dixon a little bit later.

Mr. DAVIS. Now we will hear from you, Mr. Dixon.

Mr. DIXON. Thank you.

STATEMENT OF HON. H. A. DIXON, MEMBER OF CONGRESS FROM THE STATE OF UTAH

Mr. DIXON. Chairman Davis, I appreciate this opportunity, and also my distinguished colleagues, to speak briefly on this subject. I shall not take your time to repeat some of the things Mr. Weber has been kind enough to give us because they are facts.

I live in Ogden. This is my home. The repair work has been said to be down Weber Canyon. The flood damage has been along through here. The Union Pacific Railroad comes through here and also the Transcontinental Highway 30. In 1952 the Transcontinental Highway was washed out at about this point and was out of commission, I guess, for 3 weeks.

We had in Ogden the Second Street Depot—a big Army depot—which has been moved in from the coast for safety reasons; the Navy depot of 7 million feet under roof; the Hill Airbase, which is a huge Federal installation; and now we are getting the Marquardt plant for manufacturing jet engines. We cannot afford to have this Transcontinental Highway washed out because there are only two passes through these mountains and the next pass is 85 miles south. So we just cannot have that highway washed out again as it was, and neither can we have this flood damage.

Mr. GRAY. What is the population of Ogden?

Mr. DIXON. Fifty-six thousand, but the county right here surrounding it——

Mr. GRAY. Plus your airbase.

Mr. DIXON. There are 100,000, and we have 19,000 Federal employees in these defense bases alone.

Mr. GRAY. There are 150,000 in the area.

Mr. DIXON. Yes. This flood would cover, I think, 150,000 people who will benefit from this project. Of course, there are people south of it, too. As the Army engineers stated, this is an absolute necessity for the Ogden Basin project. There is an item of $10,600,000 appropriation this year for the Weber Basin project, and that project includes this dam at Wanship and includes our Pineview Dam and includes canals and distribution systems to run water to 23 towns south of Ogden and canals also to feed this area.

The flood damage over the years has been, in 1907, $882,000, and in 1909, $1,258,000; in 1920, $1,100,000; in 1922, $754,000; in 1936, $176,000; in 1948, $82,000; in 1950, $166,000; and in 1952, $1,540,000.

So in the last 3 years there has been a sharp increase in the flood damage. This appropriation of $575,000 will be repaid $105,000 by the people in the locality and $470,000 is asked of the Federal Government.

I think it has been stated here, too, that of this $1,500,000 damage it was caused to farms and homes right in Ogden City, where many homes were washed away. The Union Pacific tracks were endangered and flooded, and, of course, that we cannot have happen. Industries in Ogden City and towns up through this direction along the Weber River, such as Wilson, Marriott, Slaterville, West Weber, Warren, and West Warren, are included.

They are trying to stop this progressive flood damage through terracing way up on the mountain slopes where the floods started. The Forest Service has done a tremendous job. I do not know whether you can see this or not. It is where the floods begin. It is clear up on the divides that they have stopped the floods in some of these counties.

The people of Weber County where Ogden is located raised $98,000 to buy private grazing land and have it terraced. That is another way we are trying to protect this area.

Mr. DAVIS. You can do part of the job that way but you cannot do all of it. When you come down to it you are going to have to provide for about 5 miles of levee for protection where required, and approximately 12 miles of clearing and snagging, and removal of 2 diversion dams in Ogden. In other words it is a relatively small cost because we have been speaking in terms of large figures this morning. The total cost is $575,000, of which, the Federal Government will put up $470,000 and the local interests $105,000. In this way you can stop all of this damage which has been going on for the period from 1907 up to date. I think you have established a good case here this morning.

Some might say because you have all of those Government payrolls, because of the depots being so close by that possible the Federal Government ought to come in there and pick up the ticket on this thing.

Mr. DIXON. Many of those people do not pay us taxes.

Mr. DAVIS. I say, some might argue as long as you have all of that Government operation in there that the Federal Government itself, to protect its own interest, ought to come in and pay this additional $105,000, but we are not going to argue that now.

Mr. DIXON. The gentleman is just correct. I have here pictures of homes flooded up to the first floor. Here is one flood at Willard which caused the loss of a lot of lives. You can see how steep the mountains are.

I shall not take more of your time, Mr. Chairman. I should like unanimous consent to insert my prepared statement in the record in the interest of time.

Mr. DAVIS. Without objection, it will be so ordered.

Mr. DIXON. And also for my colleague, Senator Bennett, to place his statement on this matter in the record.

Mr. DAVIS. Without objection, it will be so ordered.

(The prepared statements of Mr. Dixon and Senator Bennett are as follow:)

STATEMENT OF CONGRESSMAN H. A. DIXON ON WEBER FLOOD CONTROL

Let me thank Chairman Davis and the other distinguished committee members for the opportunity to speak in behalf of the Weber flood-control project.

BRIEF HISTORIC REVIEW

Before detailing recent important growth in Weber County which has increased the urgency of flood protection, let us briefly consider the past history of

floods in the area. Based upon 1950 prices and economic development the damage from major floods in the Weber Basin area (exclusive of the Willard Mountain area) the damage has been as follows:

1907	$882,000	1948	$82,000
1909	1,258,000	1950	166,000
1920	1,100,000	1952	1,540,000
1922	754,000		
1936	176,000	Total	5,958,000

You will observe that in the 26 years between the floods of 1922 and 1948 there was only 1 of importance. This dry period encouraged economic development in the flood plain. The three successive floods beginning in 1948 indicate we may be in a wet cycle. Prospective possible damage may be considerably higher than in the past. The Corps of Engineers conservatively estimate that without protective measures annual flood damage based upon 1950 prices and economic development will be $264,000.

The Army engineers' map (at the end of H. Doc. 158) identifies the area of flood hazards. These exist along the Weber River all through Morgan County, through Ogden City, and the towns of Wilson, Marriott, Slaterville, West Weber, Warren, and West Warren.

In 1952 the actual flood damage exceeded $1,500,000. Farms, homes, and industrial locations were damaged on 1,200 acres in Ogden. Transcontinental Highway 30 was washed out, and Union Pacific Railroad tracks were flooded.

CURRENT ECONOMIC DEVELOPMENT

The figures on flood damage in various years were equivalents, assuming the economic development of 1950. However, recent growth would increase the cost of similar floods. In the 5 years following 1950 the population of Weber County jumped from 83,319 to more than 100,000. Business expansion during this recent period outstripped the population jump. For example, in just the 4 years following 1950 bank clearings soared from $149,991,293.91 to $224,749,420. During the same 4 years postal receipts jumped from $738,624.30 to $1,021,464.27.

At that rate, normal continued development alone would soon make Weber County one of the most important commercial centers of the Mountain West. However, on top of this, Marquardt Aircraft Co. has recently announced in conjunction with the Air Force that they will build a ram-jet engine production facility costing approximately 4 to 4½ million dollars, and hiring within a few years 3,000 to 4,000 men. When considering the subcontracting business which will be generated and the business expansion necessary to supply the needs of the labor immigration, it becomes evident that the next few years will induce tremendous growth of population and economic activity.

THE PROJECT COST

The cost of the project you are considering, according to the 1954 price levels is estimated at $575,000, of which the Federal share will be $470,000 and the local cost will be $105,000 (p. 6, H. Doc. 158) Weber and Morgan Counties wherein nearly all the project channels lie, are anxious for the project and have offered to pay their share of the costs. You will be interested to know that local organizations have been so anxious to control floods and improve their watershed that in another connection they have collected $96,000 to purchase eroded private lands and incorporate them into the Cache National Forest where the Forest Service has done an excellent job of reseeding and building up the watershed.

This activity shows the intensity of local interest and willingness to contribute, but watershed restoration is only part of the answer. In addition channel improvements at intermittent locations in the Morgan-to-Ogden reach of Weber River to increase the nondamaging flood capacity are required. This will consist of low discontinuous earthfill levees, rock revetment to stabilize channel alinement at critical locations, the enlargement of the channel in the city of Ogden, and general clearing and snagging between the cities of Morgan and Ogden where required to remove local obstructions.

NECESSARY TO PROTECT WEBER BASIN RECLAMATION PROJECT

It must be recognized that the anticipated Weber Basin reclamation "reservoir system could not be adequately operated for flood control without the supple-

mental channel improvements or their equivalent." The channel improvements "are clearly justified as an essential element of the comprehensive plan" (p. 40, H. Doc. 158).

I surely hope that rapid action can be won for this project. Thank you again for the opportunity of appearing.

STATEMENT OF SENATOR WALLACE F. BENNETT ON THE WEBER BASIN FLOOD CONTROL

Mr. Chairman, I am pleased to have this opportunity of presenting testimony before this distinguished committee urging your approval of much-needed flood-control measures on the Weber and Ogden Rivers of particular importance to the city of Ogden and the surrounding area.

NEED FOR THE PROJECT

The year 1952 saw a severe flood pour down the Weber and Ogden Rivers inundating and severely damaging 1,200 acres of key residential, business, industrial, and manufacturing property in the city of Ogden, which at the same time washed out one transcontinental highway artery in several places and flooded another, as well as flooding strategic railroads and the Ogden railroad yards. Twenty thousand acres of improved agricultural lands were damaged and 100 acres of important residential and business land in Morgan were flooded.

The damage resulting from this one flood alone amounted to more than $1,600,000. This was but 1 of 11 major floods in the Weber Basin since 1890, and smaller floods have occurred almost every year.

The Corps of Engineers estimates, I believe conservatively, that unless protective measures are taken, flood damage will average $264,000 each year.

NATURE OF THE PROJECT

The Army Corps of Engineers proposes in its flood-control plan to operate several existing and authorized projects for flood control, including Echo, Wanship, Pineview, Lost Creek, and East Canyon Creek Reservoirs, as well as the Willard Bay diversion canal. I have been assured that the present contemplated uses of these structures will not be jeopardized or harmed in any way by operating them for flood-control purposes together with their original purpose.

Channel improvements will be made where necessary on the Weber River between Morgan and the mouth of the Ogden River. These improvements will consist of about 5 miles of low disconnected levees; rock revetment where required to prevent bank erosion; about 12 miles of clearing and snagging; and channel enlargement in Ogden by raising the banks, removing the Hooper and Plain City diversion dams, and deepening the channel after removal of the dams.

The plan will afford protection from floods downstream from the Echo Reservoir on the Weber River, and from Pineview Reservoir downstream on the Ogden River from all floods with an indicated frequency of occurrence of once in 50 years in rural areas and once in 100 years in urban areas.

COST OF THE PROJECT

The estimated first cost of the channel improvements is $550,000, of which $450,000 would be provided by the Federal Government and $100,000 by the local interests. The annual charges after completion will be $40,000, of which $15,800 is Federal and $24,200 will be locally provided.

This cost is more than justified when compared to the estimated annual benefits from the project of $242,000, particularly when it is realized that the 1952 flood causing better than $1,600,000 in damages would have been largely prevented if this project had been in existence.

LOCAL COOPERATION PLEDGED

Both Weber and Morgan Counties which are principally involved in this project have pledged their fullest cooperation in assuming the local portions of the project operation and cost. The State of Utah wholeheartedly supports the project, feeling that nothing but good can come from its approval. The only reservation the State had concerned the fear that fishing might be damaged. However, the Corps of Engineers has assured the State that developments on

the project will be coordinated with the Utah Fish and Game Commission so as to minimize any harmful effects the construction may have on the fishery resources; so the only problem has been removed.

HISTORY OF THE PROJECT

A survey of the Bonneville Basin was authorized in 1938 and included the Weber and Ogden Rivers. A report was completed by the Army Corps of Engineers in June of 1954, and I introduced a bill, S. 3607, embodying the corps' recommendations. Unfortunately it was too late for the bill to be included in the omnibus flood control bill of 1954, since the final report by the corps was not submitted to Congress until May 9, 1955.

In January of 1955, at the beginning of the new Congress, I reintroduced my bill, now S. 722, which was followed by H. R. 4262, introduced by Congressman Dixon in February of the same year.

CONCLUSION

In conclusion I sincerely urge this committee to approve the Weber Basin flood-control project so that it might be included in this year's flood control bill. It is a worthy and meritorious project. Further delay is perilous.

Mr. DAVIS. Mr. Baldwin wants to ask you a question.

Mr. BALDWIN. I want to direct the same question to you that I asked of Mr. Weber. How do your local citizens propose to raise the $105,000 which will be their share?

Mr. DIXON. I am not certain, Mr. Baldwin. I believe it is through the county taxes. Is that not right, Mr. Weber?

Mr. WEBER. Yes, sir. There are four counties involved. Two of them are the principal counties which would be the beneficiaries, and they have furnished assurances along with the town of Morgan and city of Ogden, that they will, when the time comes, raise the money in some appropriate manner. However, since there are several different jurisdictions involved they have not formed a specific plan as yet but have merely given us the assurances that they will take the necessary steps to raise the money.

Mr. BALDWIN. Thank you.

Mr. SMITH. The local interest contribution here is not in the form of a cash contribution to the Federal Government but just the normal easements and rights-of-way and things of that nature.

Mr. BALDWIN. I realize it is not cash paid to the Federal Government but it is cash paid to somebody. They are acquiring the easements. I was curious to find out what the plan was.

Mr. SCUDDER. Many of these contributions are quite likely donated, put up by the local community. They are able many times to acquire the rights-of-way as grants and to get full disposal areas for dredgings. You can usually find someone who will permit the dredgings to be put on their property, which saves part of the cost also. I think it is up to the discretion of the local interests to meet certain requirements by the engineers as a part of their contribution. It is not always cash.

Mr. DAVIS. Thank you. That completes the hearing.

Off the record.

(Discussion off the record.)

Mr. DAVIS. The subcommittee will adjourn until 10 a. m., Monday.

(Whereupon, at 12:05 p. m., the subcommittee adjourned until 10 a. m., Monday, May 7, 1956).

FLOOD CONTROL OMNIBUS BILL

TUESDAY, MAY 8, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL,
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10:10 a. m., in room 1302, New House Office Building, Hon. Clifford Davis (chairman of the subcommittee) presiding.

Mr. DAVIS. The subcommittee will be in order.

We are meeting for the further consideration of projects which may be included in the omnibus flood control bill of 1956.

SAMMAMISH RIVER, WASH.

The first project this morning is under House Document 157, the Sammamish River. According to our custom we always hear from the representative of the Corps of Engineers. This morning we have Mr. Eugene W. Weber here, who will present this project to us, and then we will hear from our colleague, Jack Westland, of Washington.

Mr. Weber, will you proceed, please?

STATEMENT OF EUGENE W. WEBER, CORPS OF ENGINEERS—Resumed

Mr. WEBER. Mr. Chairman, the report on the Sammamish River was authorized by House Flood Control Committee resolution in 1946. The Sammamish River is a stream 15 miles in length in northwest Washington, draining into Lake Washington on the outskirts of the city of Seattle. There is no Federal project for flood control on the Sammamish River. However, drainage districts 3 and 4 and King County have expended some $250,000 in improvements in this area.

The problem is that the 3,600 acres of valley land in this 15-mile reach are flooded quite frequently. Some 3,200 acres of the 3,600 were flooded in 1933. About 2,000 acres are flooded nearly every year. The average annual damages amount to about $52,000.

The proposed solution would be to improve the carrying capacity of the channel by clearing and snagging and dredging and lowering the outlet of Lake Sammamish. The cost would be $1,229,000, of which $825,000 would be Federal and $404,000 would be non-Federal. Of that amount $184,000 would be for land, rights-of-way, and the raising of bridges. There are 4 highway, 5 railroad, and several small foot bridges.

There would also be a cash contribution by non-Federal interests of about $220,000, or about 21 percent.

The benefits are $98,600, about equally divided between flood prevention benefits and increased agricultural returns or increased utilization due to the drainage improvements. The costs would be $49,800 annually, giving a benefit-cost ratio of 1.98 to 1.

The State of Washington approves the project, asking only that the work be scheduled so as not to disturb the fish, which means that the work must be confined to the period of June 1 to September 1.

The Department of the Interior also concurs with the same reservation.

The Agriculture Department has no objection to the project, and the Bureau of the Budget has no objection.

I believe those are the essential facts, Mr. Chairman.

Mr. DAVIS. They do not want the fish disturbed.

Mr. WEBER. That is right.

Mr. DAVIS. Are there any questions?

Mr. MACK. Did you say there is a considerable sum of money already spent by the local interests in endeavoring to correct these flood conditions?

Mr. WEBER. Yes, sir. Approximately $250,000 has been expended by two drainage districts and King County.

Mr. MACK. Is it or is it not included in the $400,000 of local contribution?

Mr. WEBER. It is not.

Mr. MACK. The benefit-cost ratio is extremely high on this project—about 2 to 1—and that includes both Federal and local contribution. Is that right?

Mr. WEBER. Yes, sir.

Mr. MACK. That is all.

Mr. DAVIS. Are there any other questions over here?

Mr. WITHROW. When you speak of fish, are they salmon?

Mr. WEBER. No, sir. I do not believe these are the type of salmon where the runs depend on spawning in the headwater area. This is the land-locked variety, although I do not have detailed information on it.

Mr. WITHROW. I see.

Mr. DAVIS. I think Congressman Westland will be able to answer that question for you.

Mr. WESTLAND. They are largely trout.

Mr. DAVIS. Are there any other questions? If not, we will ask Congressman Westland to come around and make any statement he feels is necessary in connection with the project. Mr. Weber has made a very thorough statement about it.

STATEMENT OF HON. JACK WESTLAND, MEMBER OF CONGRESS FROM THE STATE OF WASHINGTON

Mr. WESTLAND. Thank you, Mr. Chairman. My name is Jack Westland and I represent the Second District of the State of Washington.

There is not very much I can add to this, Mr. Chairman. I have a prepared statement and I would like to leave it with the clerk.

Mr. DAVIS. Without objection, it will be made a part of the record at this point.

(The prepared statement of Mr. Westland is as follows:)

STATEMENT OF HON. JACK WESTLAND, MEMBER OF CONGRESS FROM THE SECOND DISTRICT OF WASHINGTON

My name is Jack Westland, and I represent the Second Congressional District of the State of Washington. I would like to make a few remarks in support of H. R.2037.

This measure proposes a joint government-local flood-control project which would provide protection for housing developments and highly productive agricultural land. The project has been studied for 11 years, during which period several damaging floods have inundated farm and residential property adjacent to the Sammamish River. Especially serious overflows occurred in 1948 and 1950.

The United States Army Corps of Engineers' report on the project estimates flood damage annually at $53,000 and future net gains of $89,000 annually upon completion of the project.

Essentially, the project entails deepening the outlet of Sammamish Lake, thereby increasing the discharge volume from the lake. The Sammamish River channel and the channel of tributary Redmond Bear Creek would also be dredged to deepen and enlarge the concourses to handle increased discharge.

A low levee, 1 mile long, would be constructed along the left bank of Bear Creek near its mouth.

The total project would cost $1,045,000, of which the Government's share would be $825,000 and local interests' share $220,000 cash. Local interests have indicated their willingness to participate in the project both financially and by procurement of necessary easements and rights-of-way. Local drainage districts and King County have already expended $215,000 on ditches and channel improvements.

Also, $184,000 on lands and rights-of-way.

In addition to financial support for this project, the people of this area are solidly behind this project, which has been sought for many years.

I have received many letters from persons living in the area affected by this project, all of them requesting that it be completed in the near future. Mr. Donald R. Ritter, an officer of Maingate, a multimillion dollar shopping center soon to be constructed nearby, writes that flood conditions are worsening every year. Cutting down of trees, increased waste water from industry and housing developments and other effects of civilization have augmented the runoff problem.

The Federal East Side Clubs, a group of 40 civic organizations, points out that extensive damage to homes and farmlands occurs periodically in this area at jeopardy to lives and great detriment to property values.

The Chamber of Commerce at Redmond, Wash., says that a certain amount of flooding occurs each year, with some years being exceptionally severe. The progress of their town depends somewhat on this project. Proposed sewage disposal in the town of Redmond hinges on a controlled water level. Many valuable new building sites, existing businesses and homes are flooded. Farmers and truck gardeners incur heavy losses from recurring flood condtions.

The Sammamish Valley Grange has written me urging that this flood control project be initiated for the benefit of many of its members.

Several private citizens who have sustained damages in the past, or who are contemplating property improvements or location in this area, have written concerning the possibility of this project being done. All these letters indicate that the low-land area which is the locale of this project is on the threshold of considerable development, industrially, residentially, and agriculturally.

The population of the Seattle area is growing rapidly. The Sammanmisn area will in the near future become the scene of a large-scale housing development. The rich, black soil of the valley is excellent for production of truck crops. The proposed project would protect 2,500 acres of truck cropland from flooding. An additional 1,900 acres of potential residential development land would be created through draining of lands now necessarily used for marginal farm operations because of drainage difficulties.

This project has been studied and approved by the Corps of Engineers of the United States Army, the Department of the Army, and the Bureau of the Budget. It presents an opportunity to maximize effectiveness of funds expended in cooperation with local governmental agencies in my district. I strongly urge that you give this project a favorable report and recommend its authorization.

Mr. WESTLAND. I would merely like to supplement what Mr. Weber has said. This has a very high benefit-cost ratio of about 2 to 1. This

is in an area of great development. That picture there would make it look as though it was sort of out in the country, but I can assure that that entire valley and this point, for example, and all through that area, is a very rapidly developing residential area, as well as a truck-farming area.

I might say no surplus crops are being grown in that particular area.

This matter has been considered for some 11 years and nothing has been done on it as yet. It is constantly flooded.

I have one telegram here from people in that area saying that 1,500 acres are flooded right now, and in addition 2,000 acres are in danger of being flooded.

As Congressman Mack would well know, if the snows we have in the mountains should ever let loose this spring we will really be in great trouble. I think this project is one which merits the approval of this committee. It will help the development in that area considerably.

The local participation involved in this project is very substantial, as Mr. Weber mentioned. There are some $404,000 in local participation besides the $215,000 which has already been spent in that area. I am proud that the people of my district are willing and able to participate in these things and do not come to the Federal Government for a handout. They merely come for what they believe to be the fair share of the Federal Government participation in this project.

I wish to urge its favorable consideration by this committee.

Mr. DEMPSEY. What did you say about the fish? They are largely what?

Mr. WESTLAND. Trout. Salmon cannot get in there.

Mr. DEMPSEY. How large are the trout?

Mr. WESTLAND. Well, we have them as big as you have in New Mexico.

Mr. BUSH. I would like to ask the Congressman what the cost of this project is to the Federal Government.

Mr. WESTLAND. $825,000.

Mr. BUSH. And there has already been $450,000 spent?

Mr. WESTLAND. No, sir; $215,000 has been spent by the local interests and their additional contributions will add another $404,000.

Mr. BUSH. It seems to me they are trying to do their part out there.

Mr. WESTLAND. Thank you.

Mr. BALDWIN. Mr. Westland, regarding this portion of the contribution that is being raised locally, namely, $404,000, how will it be raised? Through local districts?

Mr. WESTLAND. That is right. Through the districts there. It is $220,000 in cash and $184,000 in rights-of-way and bridges and that sort of thing.

Mr. BALDWIN. Will the cash be raised by taxes or a bond issue?

Mr. WESTLAND. I presume the usual methods of raising that money, which is by taxation.

Mr. BALDWIN. But they have given assurance that that will be done?

Mr. WESTLAND. Yes, sir.

Mr. SCUDDER. That program will be dependent upon your meeting the requirements of the Corps of Engineers before the project will start?

Mr. WESTLAND. That is right.

Mr. SCUDDER. That is something that you have to do.

Mr. WESTLAND. That is correct.

Mr. DAVIS. Would your colleague, Mr. Tollefson, have any interest in this matter, Mr. Westland?

Mr. WESTLAND. Yes, sir; his district adjoins mine at the southern side of that, Mr. Chairman.

Mr. DAVIS. I see. Then without objection the Chair will place in the record at this point a statement by our colleague, Thor C. Tollefson.

(The statement of Mr. Tollefson is as follows:)

STATEMENT BY HON. THOR C. TOLLEFSON, MEMBER OF CONGRESS FROM THE SIXTH DISTRICT OF WASHINGTON

Mr. Chairman and members of the committee, I appreciate the opportunity of appearing before your committee to urge your support of H. R. 2037, a joint Government-local flood-control project in the Sammamish Valley in my district, which has already had the approval of the Corps of Engineers of the United States Army, the Department of the Army, and the Bureau of the Budget.

Over the past decade while this proposed project has been under study, floods have inundated and damaged property adjacent to the Sammamish River. Much of this property comprises rich land particularly adapted for successful truck farming. The project would protect 2,500 acres of this type of land from future flooding.

There is an additional 1,900 acres, now usable only for marginal farming, which would be adaptable as a potential residential development site. I mention this, particularly, because the city of Seattle has grown to such an extent, that its population, and city limits, is expanding east across Lake Washington and up toward the foothills of the Cascade Mountains. The Sammamish Valley lies in a position to be included in a very short time in this spread of the Seattle urban population.

According to the report of the Corps of Engineers, the annual flood damage in the Sammamish River Valley is set at $53,000, with future net gains annually of $89,000 upon completion of the project.

The project will cost $1,045,000. Of this the Federal Government's share is $825,000, the balance to be met by local interests which have already expressed their willingness to do so, both financially and by procuring the necessary easements and rights-of-way.

According to plan, the project entails the deepening of the outlet of Sammamish Lake, the deepening of the Sammamish River channel as well as the channel of its tributary, Redmond Bear Creek. The project also includes the construction of a low levee, 1 mile long, along the left bank near the mouth of Bear Creek.

Completion of this project, long needed, will mean a great deal of the people who live and make their livelihoods in the area to be affected by the completion of this project. They have suffered flood losses for many years. They join me in urging your favorable consideration of this bill.

Mr. DAVIS. Mr. Westland, I would like to say also that the Chair has a telegram from the mayor of the town of Bothell, Charles H. Kaysner.

The Chair will also note that there are several other telegrams from individuals. We will not put those telegrams in the record save for this one from the Mayor of Bothell which I think is proper. Then we have a telegram from Dr. John Way, chairman of the flood-control committee of the Redmond Chamber of Commerce. I think that should also go into the record. These others from individuals the

committee will simply accept, but will not crowd the record with them.

(The telegrams of Mayor Kayser and Dr. Way are as follows:)

BOTHELL, WASH., *May 4, 1956.*

Representative CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control, House of Representatives Public Works Committee, Washington, D. C.:

Passage of Sammamish River flood control bill directly and vitally concerns our town, Bothell, Wash. Cannot emphasize too strongly the passage of this bill. Year around use of our rich valley land, control of sanitation, and control of flood damage all important to us.

CHARLES H. KAYSNER,
Mayor, Town of Bothell.

REDMOND, WASH., *May 7, 1956.*

Representative CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control, House of Representatives Public Works Committee, Washington, D. C.:

Chamber of Commerce, Redmond, Wash., endorses and urges passage of bill H. R. 9522. Flood problem this area acute. City's growth stunted. Health and sewage problems serious.

JOHN WAY, M. D.,
Chairman, Flood Control Committee, Redmond Chamber of Commerce.

Mr. WESTLAND. I have received a good many telegrams, Mr. Chairman, from the president of the Portland Chamber of Commerce, the Lions Club, and various other organizations, which I did not feel I should put in the record. However, since the chairman is already doing that sort of thing, I will not add to it any further.

Mr. DAVIS. Yes. I just picked out one or two to supplement your statement.

Mr. WESTLAND. Fine.

Mr. DAVIS. Is there anything further?

Mr. WESTLAND. That is all. Thank you.

Mr. DAVIS. That will complete the hearing on the Sammamish River, Wash.

TANANA RIVER, ALASKA

Mr. DAVIS. Now we pass next to the Tanana River, Alaska, House Document 137.

General Itschner himself is going to present this project to us. This must cost a lot of money, General.

STATEMENT OF GEN. E. C. ITSCHNER, CORPS OF ENGINEERS—Resumed

General ITSCHNER. Sir, I always pick the ones that involve the least amount of Federal expenditure.

Mr. DAVIS. All right, General.

General ITSCHNER. Mr. Chairman and members of the committee, the Tanana Basin, Alaska, report was authorized by section 11 of the Flood Control Act of 1946; section 204 of the Flood Control Act of 1948; section 208 of the Flood Control Act of 1950. House Document 137, 84th Congress, 1st session, contains the report.

The Tanana River rises in Canada near the Alaska-Canada border and flows 650 miles through the central part of Alaska, generally west, where it joins the Yukon River about 600 miles from its mouth.

The entire basin of the Tanana River was studied, but only in one small part of the basin was a project developed, and that is at the city of Fairbanks, Alaska.

The city of Fairbanks has a population of close to 15,000 people, and immediately adjacent to the city is Ladd Air Force Base, with a current population of 12,000. Fairbanks is 200 miles from the mouth of the Tanana River.

At Fairbanks at this time there is a dike which prevents the floodwaters in the Tanana River from passing across country through Chena Slough and then down the Chena River and past Fairbanks, causing flooding there. This dike was constructed in 1946 by the Federal Government.

Fairbanks is troubled by floods from both the Chena River and the Tanana River. They have an average annual flood damage of $773,000. They have had serious floods amounting to about 8 in number in the past 26 years. The 1948 flood inundated about half of the town of Fairbanks, and if we had a design flood there it is estimated that essentially the entire city of Fairbanks would be flooded, as well as the entire Ladd Air Force Base.

In searching for a plan to protect the city of Fairbanks from the Tanana River and the Chena River floods, a plan was developed which would provide first a closure dam across the Chena River, with a control structure to allow bankful flows to pass on downstream in the Chena River; a dike and levee to be constructed from that point to the confluence of the Tanana River and the Chena River, which would be over 12 miles long; and a diversion channel to take the excess flows from the Chena River to the Tanana River.

The estimated cost of this project is $9,727,000 Federal cost, and a local cost of $840,000. The benefit-cost ratio is 1.63 to 1.

Local interests would contribute 3½ percent of the cost of this project. In addition they would contribute the lands, easements and rights-of-way. Some of those lands are quite costly because Fairbanks has developed very rapidly and there are a great many residences throughout this area.

Thirdly, they would contribute $30,000 a year for the maintenance of the structure.

The report was commented on by the Bureau of the Budget to the effect that they had no objection to the project. The Governor of Alaska reported very favorably upon the project. The Department of the Interior commented on the project favorably, with some minor suggestions, which will be taken care of during the design stage.

That, sir, completes my presentation. It might be of interest to you for me to read one paragraph from this morning's Washington Post. The headline is, "Alaska Flood Traps Whole Town."

The last paragraph of this news item says:

> A veteran Alaska bush pilot, Bob Byers, was credited with saving the lives of at least 16 persons at Memley Hot Springs. Byers landed his plane at the small village just as flood waters were rising.

That village is located on the Tanana River downstream from Fairbanks, but actually we have no flood-control project proposed for that town. It does illustrate the fact that these rivers in Alaska rise very rapidly and do create a flood hazard.

Mr. DAVIS. Are there any questions?

Mr. MACK. General, you state $30,000 will be contributed by the local interests for maintenance and operation. What is the estimated cost to the Federal Government of the annual operation and maintenance of this project?

General ITSCHNER. The total cost to the Federal Government for maintenance would be approximately $60,000 annually.

Mr. MACK. Local interests would pay half of the maintenance cost?

General ITSCHNER. They would pay one-half as much as the Federal Government.

Mr. MACK. Would the building of these contemplated works increase or lessen the danger of floods downstream?

General ITSCHNER. They would have no effect on the floods downstream from the mouth of the Chena River.

Mr. MACK. That is all. Thank you.

Mr. DAVIS. General, had you planned to be here for a little while?

General ITSCHNER. I will stay here today.

Mr. DAVIS. I want to ask you 1 or 2 questions later on.

General ITSCHNER. I might say I always stay here unless I have some other committee hearing, and recently it has been the Appropriations Committee.

Mr. DAVIS. Your boys have been taking fine care of us. We do not want you to stay here, General, unless it is extremely important, but I did want to ask you a question or two as to policy just a little bit later on, if it is convenient.

General ITSCHNER. I shall be here as long as you are in session.

Mr. DAVIS. Thank you.

Governor Dempsey?

Mr. DEMPSEY. How much of that land is Federal land, General?

General ITSCHNER. Some of the land is Federal land, sir, but most of it is not. The exact amount I am not able to say, but most of it is privately owned land. It a suburban area for the city of Fairbanks, and surprisingly developed.

Mr. DAVIS. Thank you, General. We will be glad to hear next from our good friend and colleague, the Delegate from Alaska, Mr. Bartlett.

STATEMENT OF HON. E. L. BARTLETT, DELEGATE FROM ALASKA

Mr. BARTLETT. Mr. Chairman and members of the committee. Of course, there is little I can add to that which General Itschner has said. Aside from the fact that this is obviously a very important project, there is a good reason and a sound reason why General Itschner should have testified for the Corps of Engineers in behalf of it. That is because we claim him as an Alaskan. He came out of West Point as a young engineer and first came to Alaska on his initial assignment with the Alaska Road Commission, which was an agency of the War Department.

I am hopeful that the committee will approve this project. It is very important to the community of Fairbanks and the community of Ladd Air Force Base. They had anticipated a bad flood this year and I believe the ice went out in such a way that the flood did not occur at breakup time last week. It could have occurred later, of course.

I do not know how much money is invested in Ladd Air Force Base which this project would protect, but I should judge $100 million

would be less than the amount that the Federal Government has put in there. It is one of the most important Air Force bases in Alaska, as you all know.

Additionally the town of Fairbanks has an assessed valuation of $42 million at the last report, which is available to me. It has had a very rapid growth from around 3,500 people in 1939 to around 30,000 in the city and the adjacent area now, exclusive of the military and civilian personnel at Ladd Air Force Base and the adjoining Eielson Air Force Base.

The city government of Fairbanks and the Chamber of Commerce of Fairbanks are much concerned with this and have written and wired me repeatedly and talked with me while I was there in expressing the hope that this project would be improved and the work soon undertaken.

I think that is all I have, Mr. Chairman.

Mr. DAVIS. Thank you very much, Mr. Bartlett. Are there any questions?

Mr. BUSH. How frequently do you have floods in that area?

Mr. BARTLETT. I grew up in Fairbanks, and if my memory serves me correctly I should be inclined to say that we averaged 2 floods a year rather than 1. We generally have 1 at the spring breakup and 1 in the fall, when the rains come. They are rather constant and almost annual occurrences.

Mr. BUSH. That is all.

Mr. BALDWIN. How would this $370,000 that is required of the local interests be raised? Is there any problem there?

Mr. BARTLETT. No problem at all, I am told. My answer would be substantially the same as Mr. Westland's was. It would be raised through taxation. Local interests have expressed not only a desire to raise the money, but an ability to do it.

Mr. BALDWIN. Would it be raised by the city?

Mr. BARTLETT. I should think the city and school districts adjacent to the city.

Mr. BALDWIN. Thank you.

Mr. DAVIS. Thank you, Mr. Bartlett.

Mr. BARTLETT. Thank you very much.

PANTEGO AND CUCKLERS CREEKS, N. C.

Mr. DAVIS. We will next pass to Pantego and Cucklers Creeks, N. C. Colonel Penney will present the project for the Corps of Engineers.

STATEMENT OF COL. HOWARD W. PENNEY, CORPS OF ENGINEERS

Colonel PENNEY. Mr. Chairman and members of the committee, this report was authorized by section 204 of the Flood Control Act of 1948. It has not yet been printed as a public document. The report was transmitted to the Congress by the Secretary of the Army on the 2d of May 1956.

Pantego and Cucklers Creeks are in coastal North Carolina, just north of the town of Belhaven. They are tributaries to the Pungo River, which flows down into the Pamlico River, which empties into Pamlico Sound just west of Cape Hatteras. There is no existing Federal flood-control project in this area.

Local interests beginning in 1910 constructed a system of drainage canals shown on this map by these straight lines. Two of the major canals are Albemarle Canal and the intercepting canal.

The problem in this area is one of flooding of farmland in the Pantego Creek area and the upper Pungo River Basin area, from heavy rainfall in the area, and from overflow from adjacent swamps such as this East Dismal Swamp, as well as impairment of drainage of adjacent farmland, which are unable to drain because the lands that are flooded nearby prevent that drainage.

There are about 10,300 acres of cleared farmlands that are subject to inundation. In addition there are some 5,000 adjacent acres of land on which drainage is impaired. There have been 14 damaging floods during the period from 1908 to 1950. Up until September 1955, the flood of record was in 1908. A recurrence of that flood under present conditions would cause damages of about $285,000. The next two most serious floods were in 1910 and 1950.

In September 1955 a flood occurred which had stages at least as high as that of record in 1908, but the inundation lasted much longer. Tentative estimates of damages from that flood are $500,000. The average annual damages as reported in this report are $49,580. The proposed solution is the improvement of the major drainage outlet to the area, consisting of channel enlargement and improvement of about 15 miles of the channel. This includes about 2.3 miles of the channel on Pantego Creek; about 1.2 miles on Cucklers Creek; and about 6 miles on this intercepting canal; and approximately another 6 miles on the Albemarle Canal. In addition, dikes will be constructed or strengthened at low points where they exist along the intercepting canal and the Albemarle Canal.

Two bridges will require modification over the canals and the estimated cost of the project is $542,100, based on January 1956 prices. Of this $413,000 is Federal and $139,100 is non-Federal, for lands, rights-of-way, and modifications of the bridges, including a cash contribution of 17.4 percent of the construction cost, an amount presently estimated to be $86,900.

The benefit-cost ratio for this project based on the current up-to-date evaluation is 1.63 to 1.

The comments of the State and Federal agencies are favorable. The Bureau of the Budget had no objection to the project. The United States Fish and Wildlife Service requested that no work be done in Pantego Creek and Cucklers Creek during April and May so as not to interfere with game fish spawning. This comment is acceptable to the Chief of Engineers on the basis that it appears that the cost of the project would not be increased thereby.

That is all I have to present, Mr. Chairman.

Mr. DAVIS. A good statement, Colonel.

Are there any questions on this side?

Mr. MACK. Colonel, you placed the local contribution at $86,900, which seems a rather large contribution compared to the Federal contribution of $413,000. Does that $86,900 or 17.4 percent of the construction cost represent land enhancement?

Colonel PENNEY. Yes, sir. That contribution is in proportion to 50 percent of the land enhancement which will accrue as a result of the improved drainage on the farmlands.

Mr. MACK. You say, Colonel, that the Bureau of the Budget is favorable. I note on this advance sheet supplied to members of the committee that it says with regard to comments of the Bureau of the Budget, "Not received as of April 1956." Has there been a change in that situation?

Colonel PENNEY. Yes, sir, there has. That sheet was made up early in April and the Bureau of the Budget has since commented favorably on the project during April.

Mr. MACK. Thank you.

Mr. SCUDDER. Colonel, is the swampland in back of the area which you have pointed out as green and orange, land which has any use or is there any provision for draining that area?

Colonel PENNEY. Sir, this swampland is not used at the present time. It does have these lateral canals, for example, in this area, that have been installed by local interests. However, it is not being farmed in the purple or lavender area.

Mr. SCUDDER. But in the rear of that, to the west and the north, that developed area is practically surrounded by swamps. Is that right?

Colonel PENNEY. Yes, sir. There is actually some lumbering that goes on in these areas now, but not to any great extent any more.

Mr. DAVIS. Thank you, Colonel. We would like to hear from our colleague, Herb Bonner, of North Carolina, if he has anything to add.

STATEMENT OF HON. HERBERT C. BONNER, MEMBER OF CONGRESS FROM THE STATE OF NORTH CAROLINA

Mr. BONNER. Mr. Chairman, the colonel has very fairly and clearly and completely explained this situation. This area has experienced floods for the last 20 years or more. In addition to the explanation given by the colonel, there are about 36 miles between this area and the town of Plymouth which drains in this direction. It all congests in this area. With the cutting of timber it naturally makes the flow of water increase and come all at one time, and that has brought about an acuteness in the problem in the locality.

Local interests have spent a great deal of money in reclaiming and making tillable the lands in this area, and increasing the productivity of the area. I am certain, I believe, that the committee will find that the project merits your favorable consideration, and I certainly hope so. Thank you.

Mr. DAVIS. Thank you, Mr. Bonner. We are glad to have you here.

Mr. Baldwin, did you want to ask any questions?

Mr. BALDWIN. Concerning the $86,900 which will be required to be raised locally, how will that be raised?

Mr. BONNER. The engineers made a study and held conferences with the people in that area and I am certain they can answer it better than I can.

Colonel PENNEY. There are organized drainage districts in the area. The district engineer discussed the plan with them, including the cash contribution, and they indicated a willingness to cooperate. It will probably be necessary for them to combine in some kind of an organization so as actually to furnish the contribution. That would be worked out during the detailed planning of the project.

Mr. BALDWIN. Thank you.

Mr. BONNER. I am confident with the great interest in the area there will be no trouble in raising the cash contribution.

Mr. BALDWIN. Thank you, Mr. Bonner.

Mr. BONNER. Yes, sir.

Mr. DAVIS. Thank you very much.

SUSQUEHANNA RIVER, N. Y. AND PA.

Mr. DAVIS. We will pass to the next project. I should like to announce that a request has been made that the Susquehanna River in New York and Pennsylvania be passed over for the present. For that reason we will not ask the Corps of Engineers to make the presentation, but our colleague, Mr. Cole of New York, was not advised in time, unfortunately, to keep a local witness from making the trip to Washington. I think in fairness to our colleague, Mr. Cole, for whom we have the highest regard, that we should permit him to introduce this local witness now to save him further inconvenience.

If Congressman Cole will come around and introduce his witness, he can make his statement at this time.

STATEMENT OF HON. W. STERLING COLE, MEMBER OF CONGRESS FROM THE STATE OF NEW YORK

Mr. COLE. Mr. Chairman, I appreciate very much your deferring to me and to my witness, under the circumstances. My particular interest is with respect to the North Branch of the Susquehanna River, over which the Army engineers have made some recommendations as a result of a resurvey which this committee directed 10 years ago, at my request. The Army engineers made a resurvey and these three dry dams are a part of the recommendations. So I am appearing personally as a representative of the area benefited primarily, as strongly in support of the three dry dams. Also there are three levee protection works in the vicinity of Nichols and Cortland, N. Y., Nichols being in my district and Cortland being in the district represented by Mr. Taber.

The witness who came down today is Mr. Horace Evans, secretary of the New York State Flood Control Commission. He is not a representative of a local area, but of the State Commission, which has been working on flood-control matters for the last 20 years. In view of the fact that this recommendation is now a decade in age, I do urge that it is timely that we give some consideration to it, which I hope will be favorable.

I appreciate your hearing Mr. Evans and I assure you he will not take too much of the committee's time.

Mr. DAVIS. Thank you, Mr. Cole. Come around, Mr. Evans. Will you give your full name and affiliation to the reporter, please?

STATEMENT OF HORACE S. EVANS, EXECUTIVE DIRECTOR, NEW YORK STATE FLOOD CONTROL COMMISSION

Mr. EVANS. My full name is Horace S. Evans. I am executive director of the New York State Flood Control Commission, Albany, N. Y.

We have 12 members—4 State senators, 4 State assemblymen and 4

Gentlemen, I had not expected to appear here today, but I happen to be down before the Appropriations Committee on another matter, and I appreciate the privilege of your giving me just a few moments to speak on this project.

This report which you are considering has been of vital interest to the State of New York since 1946, when the first resolution, sponsored by Congressman Cole, following Memorial Day floods, was adopted by this committee.

We in New York State are vitally interested in this project for several reasons. I have not reviewed this report for a long time, but it is my understanding that three reservoirs are proposed in Pennsylvania—the Tioga, Hammond, and Calumet. I am taking this from memory. The streams draining those reservoirs are controlled by the flow through the southern part of New York State and back into Pennsylvania again. In the western part of New York State we have several vitally important areas, such as Elmira and Corning. Corning, of course, is the home of the Corning Glass Works, which is one of the most important industries in war and defense of the United States. Those are highly developed areas and these reservoirs proposed would give protection in New York State to several smaller municipalities there, such as Addison, which is upstream from Corning, and Adams, and Big Flats, Elmira, Waverly, and on through Pennsylvania.

Your technical experts—and we hold them in New York State to be the best in the world—the Army engineers—have given you all of the information, and their comprehensive report also details it. I think you will find in that report a communication from the Governor or his personal representative, the superintendent of public works, urging that this report be submitted to Congress at the earliest practicable time and that the projects be anthorized for prosecution. I refer to the dams. We have two local projects in that report before you. One is at Cortland, N. Y. It is not a very large job. I think it proposes channel works and levee improvement and channel clearing at a cost of some three or four hundred thousand dollars. I am talking from memory on this.

The other local project is at Nichols in Tioga County. That would cost some $500,000 or $600,000. That requires a certain amount of local participation including the furnishing of lands, easements, and rights-of-way, and holding and saving the Federal Government free from damages due to the construction works and the operation and maintenance of the improvements after completion.

I am prepared to tell you gentlemen today that these projects have been discussed or were discussed at the time of your report going to the Governor. The State of New York through the flood control commission is prepared to participate as might be required in a congressional act authorizing these projects both as to maintenance and furnishing lands, easements and rights-of-way, or with respect to any other requirements which would be normally made for projects of this nature.

Incidentally, the Commission I represent is the official agency of the State of New York, created by the legislature in 1936 to assist in the institution and consummation of a Federal long-range program of flood control throughout the State, and to cooperate with any agency of the Federal Government in the undertaking of this type of work.

We have 12 members—4 State senators, 4 State assemblymen and 4 governor-appointees on the Commission—all of whom serve without pay except for actual expenses for which they are reimbursed.

Gentlemen, if you have any questions I will be pleased to answer them to the best of my ability.

Mr. DAVIS. Are there any quesetions as fas as this witness' statement is concerned? We will have to come back to this matter later, but I did want to accommodate you, as long as you were in the city, so as to keep you from coming back.

Mr. COLE. Mr. Chairman, may I also note for the record the attendance in person of the chairman of the New York State Flood Control Commission, Senator Jerry W. Black, who does not wish to be heard, but he is here in behalf of these projects.

Mr. DAVIS. Thank you, Mr. Cole.

Mr. EVANS. I was going to bring that out. Mr. Black asked me to speak in his behalf.

Mr. DAVIS. Thank you.

Without objection, of course, that will be accepted. Are there any questions of the witness on this statement?

(No response.)

Mr. DAVIS. Thank you very much, Mr. Evans.

Mr. EVANS. Thank you.

(Submitted statement of Mr. Flood follows.)

STATEMENT OF CONGRESSMAN DANIEL J. FLOOD ON THE SUSQUEHANNA RIVER FLOOD-CONTROL PROGRAM

Mr. Chairman, thank you very much for giving me the opportunity of expressing my views on this most vital subject of flood control and in particular the necessity of assistance by the Federal Government in combating this menace to many regions of our country.

The mighty Susquehanna River is over 400 miles long and the retention reservoirs on tributaries in New York State would benefit scores of communities in New York State and the Commonwealth of Pennsylvania, thus justifying the relatively minor expenditure of money in an interstate project, compared to the hundreds of millions which have been spent in other States.

The history of building of flood-control projects shows that with the inflationary trend of our times every year's delay means more in the cost of construction.

Some have maintained that there are other methods by which large communities can be protected from excessive flood damage, such as soil conservation and forest management, which, of course, are important. But, they have been proven wrong by the tragic history of the flood problem which bears out my contention that more and more planning and work must be put forward in order for our communities to be placed in a secure position with relation to this menace.

I would like to describe for you at this point the vital Susquehanna River watershed area and I sincerely hope that this narration gives you a poignant view of this important part of our Nation.

The Susquehanna River, with a drainage area of 27,500 square miles at its outlet into Chesapeake Bay, is the largest river system within the United States draining into the Atlantic Ocean. The fan-shaped watershed contains numerous headwater streams draining south-central New York and the eastern slopes of the Allegheny Mountains in Pennsylvania.

The North Branch, one of three main tributaries, drains an area of 11,306 square miles and joins the West Branch at Sunbury, Pa., to form the main river. In passing through the east-central portion of the Susquehanna River Basin, the North Branch drains the Wyoming Valley, a part of the largest anthracite mining region in the country—extending for a distance of 55 miles from Forest City on the Lackawanna to Shickshinny on the North Branch. The valley is crowded by a continuous line of boroughs and cities merging almost imperceptibly into each other.

Principal cities and towns of the basin are situated along the river and its principal tributaries, which are subject to frequent overflows. The greatest general flood of recent history occurred in 1936. That flood was the largest of record in the North Branch Basin and was preceded by another flood which affected areas mainly in New York State in July 1935. In the North Branch Susquehanna River Basin, these floods took the lives of 32 persons and inundated over 3,800 commercial and 135 industrial establishments, in addition to 25,500 residences, and about 200 public buildings. The floods also inundated 56,300 residences along the main streams and principal tributaries, and disrupted transportation, water supply, and sewage disposal facilities.

With the realization that destructive floods affect the national economy, Congress in 1936 authorized the construction of flood-control works in southern New York and eastern Pennsylvania for the protection of Binghamton, Hornell, Corning, and other towns in New York and Pennsylvania. The units selected under the general authorization of the 1936 act for the southern New York project consist of 13 local protection projects and 7 reservoirs in the Susquehanna River watershed. The act also authorized protection at Wilkes-Barre, Kingston, Plymouth, and Swoyersville in the Wyoming Valley. To this system, the 1941 flood-control act added Stillwater Reservoir on the Lackawanna River in Pennsylvania, and the 1944 act added Genegentslet and South Plymouth Reservoirs in New York. Four of the ten authorized reservoir projects have been completed and have already demonstrated their effectiveness. The local protection projects have been constructed except for Swoyersville, which is now nearing completion.

Between the years 1942 and 1946 there were nine authorizations for flood-control investigations of the North Branch and its tributaries. These authorizations stem from petitions of communities and people in the basin who expressed the desire that additional flood-control works be built. In response to those petitions, Congress authorized the investigations outlined in a Report on Flood Control for the North Branch, Susquehanna River, which is now before the Public Works Committee.

The flood problems of the basin have been thoroughly reviewed after receiving public testimony during public hearings held at 10 communities in the basin. The plan of protection for the entire North Branch basin, which is outlined in the North Branch report, represents the outcome of basinwide investigations made by the Corps of Engineers for flood control and allied purposes. Based on long experience and earnest study, it is believed that the plan recommended, together with the plan already authorized, constitutes a feasible and practical solution to the flood problems of a major portion of the basin.

The importance of the upstream reservoirs to the Wyoming Valley cannot be overemphasized. Although the major communities in the valley along the North Branch are protected, or will be protected, by levees, there are comparatively extensive agricultural and urban areas along the river which cannot be thus protected within economic limits at this time. These must rely on the authorized and proposed upstream reservoirs for reduction of flood crests. In addition, the protected communities would be favored by an increased degree of protection by virtue of reservoir reductions, which would amount to about 3 feet at Wilkes-Barre, in the event of a recurrence of the 1936 flood—the largest of record.

Black Vermillion River, Frankfort, Kans.

Mr. Davis. Now we pass to the next project, the Black Vermillion River at Frankfort, Kans. Colonel Dalrymple representing the Corps of Engineers will present this project.

General Itschner. Mr. Chairman, Mr. Walter Ware, with your permission, will substitute for Colonel Dalrymple.

Mr. Davis. Yes, sir. Mr. Ware.

STATEMENT OF WALTER WARE, CORPS OF ENGINEERS—Resumed

Mr. Ware. Mr. Chairman and members of the committee, this project is on the Black Vermillion River at the town of Frankfort. The Black Vermillion River is located in Kansas at this point. Kansas

City is located here. Manhattan is about 35 miles south of Frankfort. The Black Vermillion River is a tributary to the Big Blue River downstream from Frankfort and the Big Blue River is tributary to the Kansas River.

The report on the Black Vermillion was authorized by resolution of this committee on September 29, 1949.

The population of the town of Frankfort is 1,237. There is no existing Federal project at Frankfort, nor upstream from that town. However, the Tuttle Creek Reservoir will back up to a point just downstream from the town of Frankfort. The Soil Conservation Service selected as a pilot watershed, Snipe Creek, which enters the West Fork downstream from Frankfort. In other words Snipe Creek is north of Frankfort and enters the West Fork at this point which is tributary to the Black Vermillion downstream from Frankfort.

The local people have been concerned with this problem for some years. In 1948 they spent $23,000 in cleaning out the channel of the Black Vermillion River. The problem is that major floods affect the entire business district of Frankfort and also about one-third of the residential area. In the business district there are about 65 individual business establishments. The estimated value of the property in the area subject to floods is about $4 million.

The maximum flood occurred in 1948 and caused $268,000 damage. In recent years there have been several rather disastrous floods, causing severe damages. The one in 1949 was the next highest to the one in 1948, and another major flood occurred again in 1951. In the past 51 years 16 damaging floods have occurred causing an average annual damage of $71,000.

The proposed solution of this problem is to construct about 10,000 feet of levee along the east, south, and west sides of the town of Frankfort to protect the business area and residential areas subject to floods. The Missouri Pacific Railroad, the Union Pacific Railroad, and Highway 99 would be raised. The Missouri Pacific Railroad would be relocated along this alinement in connection with the Tuttle Creek Reservoir. Highway 9 will also be relocated at this point in connection with the Tuttle Creek Reservoir construction. In addition there will be some channel improvement along Little Timber Creek here and the main stem of the Black Vermillion River south of town continuing downstream to provide an outlet.

The Federal cost is $850,000. The local cost would be $140,000, or 14 percent of the total cost, of which highway alterations will amount to $110,000. The cost of right-of-way is estimated at $15,000 and relocation at $15,000. The benefit-cost ratio is 1.94 to 1.

The local interests have given us assurance they would support the project and satisfy the requirements for providing rights-of-way and holding the Federal Government free from damages and would maintain the project after completion.

We have had no objections from other Federal agencies. The Bureau of the Budget offered no objections. We received comments from the Department of Agriculture and Department of the Interior. The Governor of Kansas concurred in the recommendations of the Chief of Engineers. However, he did recommend that in the final design of the project the Chief of Engineers consider elimination of the highway alterations and that the final project design be coordinated

STATEMENT OF HON. WILLIAM H. AVERY, MEMBER OF CONGRESS

with a firm basin plan if developed in the interim period. The Chief of Engineers had no objection to those comments. That concludes the presentation.

Mr. DAVIS. Pardon me. What did you say the total cost was?

Mr. WARE. The total cost is $990,000, of which the Federal cost is $850,000.

Mr. DAVIS. Are there any questions? Mr. Withrow.

Mr. WITHROW. Yes. Regarding these two railroads, you are raising the tracks, are you not?

Mr. WARE. Yes, sir.

Mr. WITHROW. They are branch lines, are they not?

Mr. WARE. I believe they are branch lines, sir.

Mr. WITHROW. The reason I asked you that is so many of these branch lines are being discontinued by reason of the maintenance cost that once you have raised these tracks up you get away from a lot of that cost and therefore you assure to the people of that locality continued service.

Mr. WARE. That is right. I do not believe relocation of the Missouri Pacific has come up in connection with the Tuttle Creek Reservoir. However, that question did come up in connection with Union Pacific, but there is no intention of abandoning these branch lines at this time.

Mr. WITHROW. If you keep down the expense of maintenance that will insure the keeping of the branch line in operation. Is that right?

Mr. WARE. That is right. There will be some benefit to the railroads in the elimination of maintenance and decreased operation cost.

Mr. WITHROW. That is all.

Mr. MACK. Mr. Chairman.

Mr. DAVIS. Mr. Mack.

Mr. MACK. Each member of the committee has been supplied a typewritten document which, referring to the Bureau of the Budget, says comments were not available. Since that position taken in April I presume the Bureau of the Budget has supplied comments on this particular project?

Mr. WARE. Yes, sir. The Bureau of the Budget submitted comments and offered no objection to the submission of the report.

Mr. MACK. I notice that the cost of the project was estimated at $895,000 in 1954, and the current estimate as of January of 1956 is $990,000. Is that, however, due to an increase in the general costs of construction in works of this kind?

Mr. WARE. Yes, sir. It is due to the increase in price levels.

Mr. SCUDDER. Was this project submitted to the Board of Army Engineers, and has it had their approval?

Mr. WARE. Yes, sir.

Mr. SCUDDER. But not the approval of the Bureau of the Budget?

Mr. WARE. Yes, sir. A letter has been received from the Bureau of the Budget since that document was prepared.

Mr. SCUDDER. Oh, I see.

Mr. DAVIS. Are there any other questions?

(No response.)

Mr. DAVIS. We will be glad to hear from our colleague, Mr. Avery.

STATEMENT OF HON. WILLIAM H. AVERY, MEMBER OF CONGRESS FROM KANSAS

Mr. AVERY. Thank you. I would like to associate myself with the technical information that has been supplied by the representative of the Corps of Engineers rather than to review all of the same facts and figures for the record again because to the best of my knowledge those figures are firm and have been accepted by the local interests as their expected cost for their proportionate part of the responsibility for the project.

I want to reiterate that there is no opposition to this project by the local interests. In fact they are very much in favor of its authorization. I might also add the mere fact that none of them are present this morning does not indicate in any way their lack of interest in it. They expressed to me their willingness to appear this morning personally, but I told them in view of the fact that there was no opposition to the project to my knowledge, and it had a favorable report from every agency which reviewed it, I saw no reason for them to go to the expense of coming up here and personally appearing before the committee.

I think it is rather significant that there is unanimous local support for this project. As you know there have been projects in this basin in Kansas over which there has been considerable controversy in the past 20 years. On this project I think all interests are agreed that it is not only justified but is badly needed.

There were some questions raised as to the railroad. I know of no pending application by either the Missouri Pacific or Union Pacific possibly to abandon these two lines. I would not put them into the category as strictly a branch line. I think they would be more of a secondary line. They are not "hot" lines, if you understand what I mean. They are not "charged" lines. I think "charged" is the technical word. But they are not the branch line that you conventionally think of, as the Missouri Pacific particularly is an interlocking line which carries considerable freight. There is virtually no passenger business.

The local interests are prepared to assume their financial responsibility in connection with this project and have also assured me of their willingness to assume the maintenance of the project. Frankly, I think the Corps of Engineers made a rather liberal estimate here of the annual cost of maintenance. They may be better informed than I am, of course, but it seems to me about $5,000 annual maintenance on this seems high; but even then the city assured me they would be willing to assume that, whatever it might be.

For the record, Mr. Chairman, I would like to submit a resolution from the mayor of Frankfort and the City Council of Frankfort; letters from the city attorney of Frankfort and the Mayor of Frankfort; and also a list of telegrams. I will not submit the telegrams but just a list of the names of local businessmen who have assured me they want this project authorized and they believe it is necessary, and one letter from one of the businessmen who I think has probably suffered more loss than any other one man. He estimated between 1948 and 1951 he suffered an $8,000 loss by flooding of the Black Vermillion in the city of Frankfort.

Mr. DAVIS. Without objection, the documents will be made a part of the record at this point.

(The documents referred to are as follows:)

ANDREW JOHNSON & SON LUMBER CO.,
Frankfort, Kans., April 29, 1956.

Hon. WILLIAM AVERY,
Representative From Kansas,
Washington, D. C.

DEAR SIR: I am very much in favor of a dike to protect the city of Frankfort from further floods and would suggest a speedy passage of a bill authorizing funds for a dike.

During the heavy flood years of 1948, 1949, and 1951 we had better than an $8,000 loss in our lumber business alone in the first 2 years—not including damage done to buildings. It seems that flood conditions are growing worse—possibly due to the filling up of creekbeds.

Again, may I urge you to give the bill authorizing funds for a dike for the city of Frankfort your immediate attention.

Very truly yours,

ANDREW JOHNSON & SON,
By A. W. JOHNSON.

Faye Ferris	Henry Glynn
Ed Gregg	Joe Glynn
Shirley Griffiths	W. F. Kennedy
Paul P. Plummer	W. B. Lucas
H. J. Gudenkauf	Jack D. Millis
Eva Hardman	Mrs. Eva Osborn
George A. Kampert	Mr. and Mrs. W. E. Padden
Al Schrader	J. F. Pendergast
R. J. Bond	J. M. Rhodes
Taylor, Vern	B. D. Warren
Mr. and Mrs. J. D. Anderson	Dick Williams
Cyril Budenbender	L. P. Griffee
Harvey Caldwell	Lew A. Litel
Malcolm Cary	Max Clawson
L. E. Esslinger, president, Rotary Club	Mr. and Mrs. John T. Jones

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RESOLUTION

Whereas for many years the city of Frankfort, Kans., has suffered from a series of floods which have grown progressively worse as the streams contributing such flood waters have gradually filled up; and

Whereas since about the year 1950, following the devastating floods of 1948 and 1949, the city of Frankfort, Kans., has been cooperating with the Corps of Army Engineers in seeking to plan a system of protective works for said city to guard and protect said city from future floods; and

Whereas a system of such protective works has now been designed by the Corps of Army Engineers for said city, which the governing body of said city believes if built, will adequately protect said city from future floods; and

Whereas the plan authorizing such protective works is now before the Congress of the United States included in an omnibus authorization bill, and will be up for early consideration by appropriate committees of the Congress: Now, therefore, be it

Resolved by the governing body of the City of Frankfort, Kans.:

1. That we commend to Members of Congress the urgent necessity of the proposed protective works for flood prevention for the city of Frankfort, Kans.

2. That we urge the early authorization of the proposed works, and the appropriation of funds for its construction, to the end that we may avoid a future flood and its resulting loss and suffering.

3. That we do everything possible and necessary to cooperate with the Corps of Army Engineers, the Congress of the United States and its several committees, the Water Resources Board of the State of Kansas, and all others with whom it is necessary to work, in order to secure the early congressional authorization and appropriation of funds, for the protection of the lives and property of the people of the city of Frankfort, Kans.

Adopted at a special session of the governing body duly held on this 23d day of April 1956.

KATHERINE BRAWLEY, *Mayor.*

Attest:

MARY ELLEN CLARK, *City Clerk.*

THE CITY OF FRANKFORT,
Frankfort, Kans., April 23, 1956.

Hon. WILLIAM AVERY,
Representative from Kansas,
Washington, D. C.

DEAR MR. AVERY: This letter is merely a repetition of the wishes of the citizens of Frankfort, for authorization of the proposed dike for the city of Frankfort.

Plans began in 1949 with Army engineers—and a consistent, steady progress has been in the making ever since. As early as any step could be taken to further this step, it has been done. In 1949 we were advised that it may take as many as 5 to 7 years for consummation, and now this time has elapsed. Reports of our progress and the wishes of our city have all been filed with the Army engineers.

Our business people are wholly cooperative in feeling this dike is feasible and necessary, and we wish it to be included in the omnibus which is up for hearing. I do hope that the authorization is passed.

Yours very truly,

Mrs. KATHERINE BRAWLEY, *Mayor.*

FRANKFORT, KANS., *April 21, 1956.*

Hon. WILLIAM H. AVERY, M. C.,
House Office Building, Washington, D. C.

DEAR MR. AVERY: Confirming our telephone conversation with you of yesterday afternoon, we want you to know of the continuing interest of the people of this city in the plan for flood protection developed by local interests and the Corps of Army Engineers, which is now before the Public Works Committee of the House for its consideration.

For more than 6 years, the writer has worked toward the goal we now seem to be approaching. We have had innumerable meetings, compiled statistical data, and escorted various officials in and about the city to show the height of floodwaters.

We know that you appreciate the seriousness of our situation, and we hope that your testimony and that of the Corps of Army Engineers will be sufficient to convince the committee of the urgency and importance of this project.

If you should find that the situation requires our attendance at any of the committee meetings, we will arrange to drop our other work and make a quick plane trip to Washington. Please keep us advised.

With kind personal regards, I am

Respectfully yours,

WILLIAM M. SHAFFER,
City Attorney.

Mr. AVERY. I could go on at some length in furtherance of this project but I think it would be more or less repetitious of the facts and figures given. In order to save the time of the committee if there are any questions I will be very happy to answer them, and if not I would like to thank the committee for extending me this opportunity.

Mr. DAVIS. Thank you, Mr. Avery. Are there any questions?

(No response.)

Mr. DAVIS. That concludes the project. We will ask General Itschner if he will appear for a moment. This will be off the record.

(Discussion off the record.)

Mr. DAVIS. Without objection we will stand adjourned until 10 a.m. tomorrow.

(Whereupon, at 11:25 a. m., the subcommittee adjourned until 10 a. m. the following day, Wednesday, May 9, 1956.)

FLOOD CONTROL OMNIBUS BILL

WEDNESDAY, MAY 9, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10:20 a. m., in room 1302, New House Office Building, Hon. Clifford Davis (chairman of the subcommittee) presiding.

Mr. DAVIS. The committee will be in order for the further consideration of possible projects to be included in the omnibus flood-control, river and harbor bill.

Before proceeding I should like to announce to the committee that I received a very warm letter from Chairman Clarence Cannon of the Appropriations Committee, acknowledging receipt of our resolution and assuring us that it would be brought to the attention of the full committee and that very serious consideration would be given to it.

We have these 11 basins to be considered for an increase in monetary allowances. I suggested to Mr. Brennan on yesterday that he take one basin this morning very, very thoroughly, in other words, start at the very bottom and come right on up. Then I thought we could approach the remaining 10 a little bit easier. For that reason we have hesitated a few minutes, hoping that other members of this subcommittee would come in. There is a conflict in that the Rivers and Harbors Subcommittee is meeting at the same time today. Of course, the highway bill took so long and the pressure now is tremendous. I am sure all of you are getting a lot of it, just as I am.

On yesterday I thought some of our colleagues were really a little bit too persistent. For instance, one of our colleagues introduced a bill on the 7th, which was the day before yesterday, and he came in on yesterday insisting that we hear it and authorize it immediately. Now that is not any joke. I am not putting his name in the record because he has been here a long, long time, but I will show you the bill.

Still others are just coming in and calling every day for hearings. I think we have made very good progress up to this time and next week we have several very difficult ones. I hope the committee will meet promptly on Monday. We have this big Oraville project in California which involves several hundred millions of dollars. I am taking this minute to suggest, as I discussed with our colleague, Mr. Scudder, that I believe after that hearing on Monday we will determine that that bill should stand on its own and should not be made a part of this omnibus bill, because it is a matter of extreme importance.

Some of us went out there and saw the great damage. It is a long-range plan and if it works it will do the job in more ways than one, because it will not only conserve the water and protect against flood damage, but they will use the water far down, many miles down, below that area, for all sorts of domestic purposes, and other purposes.

Mr. SCUDDER. Off the record.

(Discussion off the record.)

Mr. DAVIS. So, gentlemen, if we will pay rather close attention to Mr. Brennan, who always presents the matter well, it will be most helpful. I wish he would start right on the ground now and tell us what a basin plan means, and the original authority for it, and bring us right on up to date on this one. Then the other 10 I hope will come a little easier.

Do you want to come a little closer, Mr. Brennan?

STATEMENT OF JOSEPH R. BRENNAN, CORPS OF ENGINEERS—Resumed

Mr. BRENNAN. I would like to start from here, Mr. Chairman, and then go to the map and come back here to use my notes. I think it would be advisable to make a very brief introductory statement on just what a basin monetary authorization is, and then, as you suggested, take up one specific basin, and then come back to the question of the specific amounts which appear to be deficits over the next few years for these 11 basins that you have referred to.

I would like to say, Mr. Chairman, in accordance with your discussion yesterday, representatives of the Department of the Interior and the Bureau of Reclamation are here and when we come to the Missouri River Basin, because that is the one basin in which it has been traditional that the omnibus bill include increased monetary authorization both for the Bureau of Reclamation and the Corps of Engineers, they would like to provide information. If you would like I can introduce these gentlemen at this time.

Mr. DAVIS. All right.

Mr. BRENNAN. Mr. James Bradley of the Office of the Secretary of the Interior and Mr. Arnold Babb with the United States Bureau of Reclamation. They will be prepared to discuss their aspects of the Missouri Basin plan.

Mr. Chairman and members of the committee, the basin concept originated in 1936 with the passage of the first National Flood Control Act. In addition to authorizing a number of specific projects which had no monetary limitation, that is, which were authorized by terminology which said "at an estimated cost" with no specific restriction if that cost should exceed at the time of the construction the amount shown in the bill—in addition to those specific projects there were a number of large basins which because of their magnitude and scope the committee and the Congress felt should not be completely authorized, although in general the plans might be approved.

On those large basins the Congress specifically authorized a monetary amount, not to be exceeded by appropriation, which was less than the cost of the basin plan.

In subsequent omnibus bills, in 1938, 1941, 1944, 1946, 1948, 1950, and 1954, amounts for these various basins were reexamined by this

committee and additional authorizations were granted, so that the appropriations which came along from year to year would not exceed the total amount authorized. That is the general concept of the basin plan and I can illustrate it by explaining one which I have selected for simplicity and ease of illustration at Los Angeles, Calif., and then return to the matter of increased authorizations for the other basins which are in this category.

Mr. DAVIS. All right, sir.

Mr. BRENNAN. I believe you are all familiar with the physical characteristics of the basin, but very briefly I might explain it. The comprehensive flood-control project for Los Angeles County shown on this map was authorized originally in 1936 as a key plan, and then comprehensively in 1941.

The present plan is composed of main flood-control reservoirs, five in number, located at these points: Sepulveda flood-control basin in the San Fernando Valley; Hansen flood-control basin on one of the tributaries; Whittier Narrows on the San Gabriel; Santa Fe on the same river, and Lopez on a tributary of the Los Angeles River. In addition there are many miles of channel improvement on the Los Angeles River, and to a lesser extent, on the San Gabriel River and on the tributaries of both streams.

Included in the plan is channel work on some streams, such as Ballona Creek, which drains directly into the Pacific Ocean, but is part of the overall Los Angeles coastal plain complex.

The total cost of the plan at present-day prices is approximately $380 million. The total authorizations to date amount to $210 million. The appropriations to date amount to $175 million. So there is a balance of $35 million between the total amount appropriated through the fiscal year 1956 and the total amount authorized.

Mr. DAVIS. The total amount authorized is $210 million?

Mr. BRENNAN. Yes, sir.

Mr. DAVIS. And we have appropriated up to now $175 million?

Mr. BRENNAN. That is correct.

Mr. DAVIS. And the difference between $175 million and $210 million is what is left to be appropriated?

Mr. BRENNAN. That is right.

Mr. DAVIS. When was this basin established originally?

Mr. BRENNAN. It was established originally in 1936 on the basis of a report which recommended a key or skeleton framework plan including the main basins, namely, Sepulveda, Hansen, Whittier Narrows, and Santa Fe, and a fifth basin which is smaller called Lopez, and the main stem of the Los Angeles River, and certain other improvements. A survey report was then authorized for a comprehensive study since the 1936 bill and the plan contained in it were not based upon the usual comprehensive study of a survey report nature. That study went on between 1936 and 1941 and culminated in the survey report of 1941, which repeated the recommendations for the framework of the plan and added to it all of the necessary adjuncts on the tributary channels on both the San Gabriel and the main Los Angeles River. The original authorization was based upon a $70 million estimated cost and included the items I spoke of as being part of the framework.

In 1938 there was a modification having mostly to do with the question of rights-of-way and who was to acquire them and the authorization was increased by $12,500,000. In 1941 the comprehensive plan as represented in the survey report was approved, and there was an additional amount authorized of $25 million.

In 1944 another amount of $25 million was added to the monetary authorization, and the same in 1946. In the Flood Control Act of 1950 an additional amount of $40 million was granted, and in the Flood Control Act of 1954, $12,500,000 was granted. All of the figures which I have read will total the $210 million authorization which the plan now has.

Now, Mr. Chairman, I have not gone into a discussion of flood damages and other aspects of the plan. I do not know whether you desired me to do that, but I will be glad to, if you wish.

Mr. DAVIS. In other words, you started at $70 million originally and then had to keep on until you got up to $210 million. In other words, as the work progressed and you saw that the work plus the increase in the cost was going to make it cost more, then you had to come back to this committee and ask this committee to authorize an increase in the amount of money allowed. That is correct, is it not?

Mr. BRENNAN. That is correct, Mr. Chairman. These increases in authorization for basin plans come about for two reasons. One is the fact that the original authorization was specifically designed to be less than the full cost of the plan at that time, because the Congress desired to have further consideration given to the plan as time went on and as it developed. Then, of course, as you pointed out, over the many years since the origination of these plans price indices have gone up so that the costs of the plans themselves have risen through the price changes and the changes in design, as well as through developments which could not have been foreseen in the earlier years, the latter instance being very typical of Los Angeles, which has grown tremendously in value and concentrated wealth and property to be protected.

Mr. DAVIS. You are asking this committee this morning to authorize the difference between $175 million and $210 million?

Mr. BRENNAN. Sir, the actual difference is the amount which we estimate may be required over the next few years. On that point, Mr. Chairman, I would like to explain how we arrive at these amounts of additional authorization which we are being suggested. We consider the appropriation which is now before the Appropriations Committee for the fiscal year 1957. We then, as best as we can, estimate the probable appropriations or the reasonable amounts to be anticipated for appropriation in succeeding years, and we go up to the fiscal year 1960 because we feel that if we are given increased authorization to cover four years from now, 1957, 1958, 1959, and 1960, then we will be safe if there is not another omnibus bill until the fiscal year 1959.

The reason why we go one year beyond 1959 is to allow for the budgeting process which requires the authorization to be available one year in advance in order for us to present the estimates to the budget and to the Congress.

Mr. DAVIS. There are other reasons why you cannot arrive at a final cost let us say back 6 or 7 years ago, or even now. You have

found that the Congress wants to keep an eye on and a control over this, and you would not just reach out into the thin air and get what you would normally think would be a reasonably expected demand for the money. In other words, you come along by steps and now you say the difference between $175 million and $210 million is what you need and you would ask for how much more to be safe through 1960?

Mr. BRENNAN. The amount on the Los Angeles project is $44 million and it is based on the appropriations which will use up the $35 million excess we have now and will take account of additional appropriations which will possibly be granted prior to the fiscal year 1960 or up through the fiscal year 1960.

I can specifically illustrate that, Mr. Chairman, in this fashion: In the fiscal year 1957 the approved budget estimate is $17 million, which means a total appropriation will have been made then of $192 million as against the $210 million balance, which I spoke of. In the fiscal year 1958 we estimate that we should allow for approximately $20 million, of appropriation, to be on the safe side, which would be roughly a $3 million deficit by that time. In other words, in the fiscal year 1958 we will be needing some $3 million of authorization to carry the appropriation which we might reasonably anticipate. That deficit builds up in the fiscal year 1959 to $23 million, and in the fiscal year 1960 to $43,076,000.

So the accumulated deficit shown on paper up to and including 1960 indicates that a figure of $44 million would be sufficient on the basis of these estimates to permit us to operate through that period.

Mr. DAVIS. And the total authorization you are asking this committee to approve would be how much?

Mr. BRENNAN. An additional $44 million.

Mr. DAVIS. On top of the $175 million?

Mr. BRENNAN. On top of the $210 million?

Mr. DAVIS. That would be $254 million?

Mr. BRENNAN. Yes sir, $254 million.

Mr. DAVIS. I have been trying to get schooled in this myself. We started one of the basin plans from the very bottom, Mr. Jones, Mr. Cramer and Mr. Schwengel, on the question of the need for increased monetary authorizations in these basins. I think we picked one that was not too difficult for us, or for me at least. I had to learn my lesson.

Are there any questions?

Mr. MACK. Mr. Chairman.

Mr. DAVIS. Mr. Mack.

Mr. MACK. Mr. Brennan, in all of the projects combined, how much additional authorization are the Army engineers going to ask at this session of Congress?

Mr. BRENNAN. The total authorization based on the computation I just gave you would be specifically $504 million.

Mr. MACK. That is to cover a 4-year-period?

Mr. BRENNAN. Yes, sir. For 11 basins of the 17 basins which are in the flood control program.

Mr. MACK. How much authorization have the engineers at the present time that has not been used up? Taking into consideration the amount that is now requested of the Appropriations Committee?

Mr. BRENNAN. The total unused authorization at this time, sir, is——

Mr. MACK. What I am trying to get at is the total amount of money you will have to spend on this authorization for a 4-year period.

Mr. BRENNAN. To answer that question——

Mr. MACK. $504 million plus whatever it is.

Mr. BRENNAN. Plus the unused authorization we have. Let me ask Mr. Van Vladricken to compute this. It is just a matter of adding up the individual basins and he can do it while we are discussing this.

Mr. MACK. At your convenience. I wanted to see what was the average authorization available for each of the 4 years. That is the only question I have.

Mr. SCUDDER. Mr. Brennan, I notice in the list you have here the Mississippi River Basin. Is that the same type of project?

Mr. BRENNAN. That is the upper Mississippi Basin, which is not the one we think of as the alluvial valley project.

Mr. SCUDDER. I thought these 11 basins were the ones you were asking additional amounts for. Do they come in different categories?

Mr. BRENNAN. Yes, sir. These 11 basins are 11 basins in the flood-control program and do not include the Mississippi River Basin, that is, the alluvial valley of the Mississippi, which is usually considered by the committee at the time it considers the lower Mississippi Valley as a whole. There are four navigation basins, which are basins which are authorized and are normally considered by the Rivers and Harbors Subcommittee, but it so happens that none of those basins, we estimate, will need any increased authorization if the next omnibus bill is in 1959.

Mr. SCUDDER. There are 18 projects listed here. What was the figure of 11 that the chairman mentioned a while ago?

Mr. BRENNAN. Eleven are the following basins out of the 18 you have listed: The Connecticut Basin, which is the first, will have a deficit.

The Savannah Basin will have a deficit.

The Central and Southern Florida Basin, which is the third listed, will have a deficit.

The Arkansas River flood-control basin, which is the fourth, will not have a deficit.

The White River Basin will have a deficit. That is the fifth listed.

Then following that are the Susquehanna, the Brazos, the lower Cumberland, and the Ohio. None of those will have deficits. We are not suggesting additional authorization.

The upper Mississippi will have a deficit, but not the South Platte.

The Missouri will have a deficit of $200 million for the Corps of Engineers' portion, and the Department of the Interior will later present the deficit from the standpoint of their aspect of the work.

The Sacramento will not have a deficit; the San Joaquin will; the Kaweah and Tule will; the Los Angeles will and the Santa Ana will; the Columbia will have a deficit.

The next three listed are all navigation basins, but as I stated, they will not have deficits, in any event. This list does not include the only other basin, which is the Mississippi River and tributaries alluvial valley project, which will be considered later.

Mr. DAVIS. Mr. Scudder, as you know, the lower Mississippi has the Mississippi River Commission established by law long ago, and that will be presented differently by General Hardin, president of the Mississippi River Commission, who has been set down for the 22d of this

month to come along just like Mr. Brennan is, in taking these other projects.

Mr. WRIGHT. Mr. Chairman, do I understand the gentleman to say not all of these basins listed are included in your request for additional authorizations, but only those where a deficit is forecast?

Mr. BRENNAN. Yes, sir.

Mr. WRIGHT. I am not sure I understand this tabulation, but I am just trying to understand it. The amount of your requested authorization would be the first column of figures, listed under "Present estimated cost"?

Mr. BRENNAN. I believe, sir, you have a list which the committee staff made up, and I do not have a copy of that. Perhaps if I can borrow one here. Yes. The first column on the committee list is the present estimated cost of the entire plan. The second column is the present monetary authorization, which is the amount which the Congress over a period of years and in successive acts has accumulated as a ceiling on the amount of appropriation that could be made.

The amount of appropriation actually made is shown in the third column, and then the budget estimate for 1957 is in the fourth column.

For example, on the Connecticut River Basin, the first column lists the total cost at $184,198,900. The present authorization is $72,957,000. The appropriations through 1956 are $36,567,000. So there is a $36 million balance of authorization left on the Connecticut River.

Mr. DAVIS. Come back to the Los Angeles, which is the one we have been going into in such detail. As you now view it, it would take $380 million finally to do that job up completely?

Mr. BRENNAN. Yes, sir.

Mr. DAVIS. That is the way you have it up to date. We have already authorized $210 million and you have appropriated $175 million. With the $16,500,000 in the budget this year and with the balances necessary to run you through 1960, you feel that it will be necessary for us to increase the $210 million monetary authorization to $254 million in order to get you through 1960?

Mr. BRENNAN. That is exactly right.

Mr. DAVIS. Then when we have an omnibus bill in 1960 we start thinking as to how that relates itself to the total of $380 million when that time comes?

Mr. BRENNAN. That is correct, Mr. Chairman, except that these figures are based on the assumption that there will be an omnibus bill in 1959. The allowance through 1960 is to permit 1 year's time, so that our budgeting processes can be taken into account.

Mr. DAVIS, That is right. Excuse me, Jim.

Mr. WRIGHT. That explains a lot of it to me, but let me ask you this further question: Why is it on some of these basins where you are nearing the completion of the programs you are asking for additional authorizations, whereas on others where the anticipated program has not even really been tapped there is no request for additional authorizations? I think naturally in terms of the Brazos, which flows through most of Texas and my district, and a very heavily populated area, emptying into the Gulf of Mexico—$137 million is the estimated cost of the completion and only $40 million is authorized, and of that only $100,000 has been appropriated. Is there a reason for some of these things being pushed and others being more or less held back?

Mr. BRENNAN. No, sir. On the Brazos we have estimated that the appropriations which might be anticipated—and, of course, that is somewhat speculative on our part—would not exceed an average rate of $10 million a year for the next 4 years. Therefore the $40 million which is now available in the form of authorization and toward which there has been no appropriation except the $100,000 in planning money, would be ample to take care of the probable appropriations through 1960.

Now if this committee on any of these basins feels that we have not estimated correctly or made the proper allowance, then, of course, it is appropriate to make a change.

Mr. WRIGHT. I understand that and I was just wondering about it too—and I am glad to hear your comments—as to whether it is our function. If I understand it correctly now, the Corps of Engineers decides where the money should be spent, and, having decided that, it requests appropriations through the Appropriations Committee. Prior to that you had to come and ask for authorizations from us. In other words, where you are spending on the Susquehanna, for instance, $40,000 which has been appropriated and where you are asking $95,000 in this year's budget which has been approved, and on the Brazos where you spent $100,000 and you have $100,000 approved for next year, you do not anticipate doing any more than that in the next 4 years. In other words, you are going to sort of let some of that lie.

Mr. BRENNAN. On the Brazos, we are basing this deficit on the fact that the $100,000 will permit us to proceed with the planning, and then the normal course of events would be to go into heavy construction at the rate of perhaps several millions of dollars the first year, and possibly 9 or 10 million dollars the second year. So by the time 1960 comes around we might be well into the construction of one of the dams, but still not using up the $40 million.

Mr. WRIGHT. I understand that. My curiosity is probably getting us a little deeper into the question than we intended to go, Mr. Chairman.

Mr. DAVIS. That is all right.

Mr. WRIGHT. I was just curious as to why you have been pushing some of them faster than others and why it is that on some of these like the Los Angeles you are nearing completion with a $380 million estimated cost of the total project, where you already have $210 million authorized and you want more. Why is it that in an area of that type—and my question is not critical but really for information—why is it you rush in one area and push it through to completion, whereas in other areas you do not go ahead? Is it that the need for flood control is not as crucial or not as critical, and that property values and the annual flood loss damage are not as great, or what is it?

Mr. BRENNAN. Those are some of the many factors, but I think perhaps the real answer to your question is that basins which are well along, let us say, 50 percent or more completed, usually have a number of large projects underway.

Mr. WRIGHT. I understand that, and it costs progressively more to keep moving on them.

Mr. BRENNAN. That is correct.

Mr. WRIGHT. But my fundamental question still remains. What is the basis for your determination on which ones to push and get further along on, just as you have gotten the Los Angeles one along to this stage, whereas on the Brazos you are just planning? I am just curious about it. That is all. I would like to know more or less how you go about determining where you will spend most of this money and do most of this work. In other words, where are you going to hurry and where are you going to take your time?

Mr. BRENNAN. Well, I do not think that the element of relative speed enters into this at all, really. Actually for the purpose of this authorization what we want to estimate is the problable ceiling. When we come to the appropriation structures and recommend going in for appropriations then, of course, the considerations you speak of enter into it.

Mr. WRIGHT. That is exactly right. When you get to that stage of asking for appropriations, how do you determine in the Corps of Engineers which ones are most urgent and which ones should be speeded up and which ones need the most money now?

Mr. BRENNAN. Well, sir, that is based upon study and consideration by the Chief of Engineers and his staff and upon recommendations of the division and district engineers in the forty-five-odd district offices throughout the country. Each one comes in with his expression as to the urgency for the projects in his district. They are all assembled and viewed by the division first in the light of the whole division, and then by the Chief of Engineers and the staff at the Washington level. It is a complex matter, taking together all of the various requirements, so that we finally wind up applying budget allowances to where the most urgent problem is, considering all of the factors involved.

Mr. WRIGHT. That is not so much in the purview of or committee. Our job is simply to authorize where they are running out of money?

Mr. DEMPSEY. This is strictly for engineering and not for construction.

Mr. WRIGHT. I can see that.

Mr. DEMPSEY. We have not reached the construction phase yet.

Mr. WRIGHT. They are contemplated then?

Mr. BRENNAN. As an example, the Brazos was authorized in 1954, whereas the Los Angeles was authorized in 1936.

Mr. WRIGHT. That answers my question completely. Thank you.

Mr. WITHROW. This gentleman will appear on the upper Mississippi?

Mr. DAVIS. We have the upper Mississippi, but on the lower Mississippi General Hardin represents it.

Mr. WITHROW. Will you appear on the upper Mississippi?

Mr. BRENNAN. Yes, sir; I have the upper Mississippi, which is included as one of the basins for which we will need authorization.

Mr. WITHROW. Thank you.

Mr. SCHWENGEL. I have just one question. For the benefit of the committee, where does the upper Mississippi begin?

Mr. BRENNAN. It begins at Cairo, above the Ohio River.

Mr. SCHWENGEL. That is all.

Mr. JONES. May I ask one question for the purpose of the record? I know there will be a great deal of inquiry since we are going to go

into it. The Alabama-Coosa project is not listed and I presume that is due to the fact that we have modified the authorization in the 1954 act to permit the Alabama Power Co. to construct the dams that were expected to be constructed by the Corps of Engineers; is that correct?

Mr. BRENNAN. Let me say that on the Alabama-Coosa there is a $60 million monetary authorization and only $656,000 has been appropriated. So that even not regarding the question of that authorization——

Mr. JONES. You still have enough money?

Mr. BRENNAN. We still have enonugh money.

Mr. JONES. In authorization?

Mr. BRENNAN. Yes

Mr. BECKER. Alabama is taken care of.

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. I do not have any questions.

Mr. DAVIS. Mr. Baldwin has been a very faithful member and a very helpful member all these days that we have been working on this. I want him to listen carefully to this so he can come up with a good answer and help us all.

Mr. BALDWIN. Thank you, Mr. Chairman.

Mr. DAVIS. Mr. Cramer.

Mr. CRAMER. No questions.

Mr. DAVIS. Now having gone through that one, may I suggest you take up the Missouri next and then we can free Mr. Bradley and Mr. Babb.

Mr. BRENNAN. Yes, sir.

Mr. MACK. May I ask this one question? In this comprehensive river basin development, does it include navigation as well as flood-control projects?

Mr. BRENNAN. Yes, sir. There are four basins which are primarily a matter of navigation, rather than flood control, of this same nature.

Mr. MACK. It does include also the large dams constructed for navigation, flood control, and hydroelectric power development?

Mr. BRENNAN. That is correct. For example, the Columbia River is carried under the flood-control authorization, but it includes, of course, the navigation aspects as well.

Mr. MACK. Does it include a reclamation dam such as Grand Coulee?

Mr. BRENNAN. No, sir. This occurs only in the case of the Missouri Basin.

Mr. DAVIS. Do we have four navigation projects you are going to present this morning that need additional monetary authorization?

Mr. BRENNAN. No, sir. I was just pointing out for the record an explanation of this list. The four navigation projects listed there do not require additional monetary authorization, so they will not be presented.

Mr. DAVIS. When we reach the lower Mississippi I understand we have about 4 there which are navigation projects— 1 at least from Baton Rouge down to the gulf.

Mr. BRENNAN. Yes, sir. There are several individual projects in connection with the lower Mississippi River, and also the question of increased basin authorization which will be taken up by General Hardin.

Mr. DAVIS. But that is not navigation. You have at least one navigation project on the lower Mississippi.

Mr. BRENNAN. Yes, sir; that is correct.

Mr. DAVIS. I thought insofar as so many of our members of this subcommittee are members of the Subcommittee on Rivers and Harbors, I would ask the chairman, Mr. Blatnik, to come in and sit with us on the 22d to try to save time, because I repeat again that the pressure is tremendous from the members. I sort of got a little nervous yesterday.

Is it satisfactory to proceed to the Missouri River, so that Mr. Bradley and Mr. Babb can go back to their Department?

Mr. BRENNAN. I assume, Mr. Chairman, you meant to speak now only of the authorization figures in connection with the other basins, having explained the development of the Los Angeles. You are now interested only in the deficit amounts with respect to the other basins?

Mr. DAVIS. If the committee follows me, I thought if we took this one up as thoroughly as we have, then we could come to the money needed in the other 10 without all of the conversation that we just had on this one. That is agreed by the committee. Of course, if any member has questions as we go along, they can be asked.

Mr. BRENNAN. On the Missouri Basin, Mr. Chairman, the total project cost insofar as the Corps of Engineers is concerned is $1,789,279,000. The total monetary authorization to date is $833,710,000. The total appropriation through the fiscal year 1956 is $657,349,000. The approved budget estimate for the fiscal year 1957, to give you an indication of the annual rate of appropriations which may be anticipated, is $58,700,000.

Mr. DAVIS. Just a moment. I think that will show our colleague, Mr. Wright, something that he knows already. After you reach a certain point that has jumped up to $58 million there. It is almost one-tenth of the total appropriations up to date. So when you really do get into the construction, the Appropriations Committee has to supply more money progressively.

Mr. BRENNAN. Estimating the possible appropriations, and trying to be on the safe side for the next 4 years, and taking this annual rate as we have figured it, it appears a total of $200 million would be a reasonable ceiling for an increase in the Missouri Basin authorization. That would make the overall total authorization slightly in excess of $1 billion.

Mr. DAVIS. In other words, some years back you estimated the cost of completing that job to be $1,789 million. But now, to play safe on the monetary authorization through 1960, assuming we would have an omnibus bill by about 1959, you want to add a couple of hundred million dollars to the $833 million which you have in the way of authorization, bringing it slightly over $1 billion, but still under the final estimated cost, which was arrived at some years back?

Mr. BRENNAN. That is correct.

Mr. DAVIS. Which continues to give the Congress an opportunity to watch this as it goes along, because it could well be that it could not cost a total of $1,789 million, or, by the same token, in years to come it could cost a little bit more than $1,789 million.

Go ahead, Mr. Brennan. I am just trying to get this clear in my mind.

Are there any questions, gentlemen? They want $200 million now in increased monetary authorization, bringing it up to slightly over $1 billion on the Missouri Basin project, to take care of them through 1960.

Mr. JONES. Without the increased authorizations they would not have sufficient money at the current rate of appropriations of $58 million to go through the period which you stated.

Mr. DAVIS. That is well stated.

Mr. MACK. Mr. Chairman.

Mr. DAVIS. Mr. Mack.

Mr. MACK. Mr. Brennan, after appropriations are made this year you still will have $100 million left over in authorizations. You desire to add to that $200 million, to provide $300 million for a 4-year operation. In other words, it is the anticipation of the Army engineers they will carry forward construction of the Missouri Basin at the rate of about $75 million a year; is that correct?

Mr. BRENNAN. Yes, sir; that is approximately correct. Actually, we are allowing for possible increased appropriations in the fiscal years 1958, 1959, and 1960, when the large dams are reaching the peak of construction.

Mr. MACK. Do some of those dams involve power facilities?

Mr. BRENNAN. Yes, sir; the mainstem dams on the Missouri Basin do involve power.

Mr. MACK. The money spent on these dams now eventually will be paid back to the Federal Government, both principal and interest; is that corrrect?

Mr. BRENNAN. Yes, sir.

Mr. MACK. So that these repayments will reduce the actual financial outlay or investment to some extent, because part of the money will come back to the Federal Treasury.

Mr. BRENNAN. That is correct.

Mr. BALDWIN. As a matter of curiosity, when funds start coming back then do you credit them against the appropriations made, or how are they handled from an accounting standpoint?

Mr. BRENNAN. No, sir; they are not credited against the appropriation. The Department of the Interior handles the actual repayment. They do the marketing of the power and they sell the power. We are not directly involved in it. But the returns as revenues do not go back into the project.

Mr. BALDWIN. In other words, following up Mr. Mack's question, as far as this particular committee is concerned the fact that funds start coming back has no bearing whatsoever on our increasing the authorizations for it. We still have to do it even though funds are coming back in the same amount?

Mr. BRENNAN. That is correct.

Mr. MACK. Will the gentleman yield?

Mr. BALDWIN. Yes.

Mr. MACK. Mr. Brennan, how much electricity will be generated in a monetary sense, and how much can be sold at these dams you are building in the Missouri Basin?

Mr. DAVIS. Perhaps Mr. Bradley can answer that.

Mr. BRADLEY. Mr. Chairman, perhaps we could answer that through the allocation of the total investment in the project. The total investment to commercial power in the combined Corps of Engineers and Interior Department enterprise is $1,144 million.

Mr. MACK. That is in power dams?

Mr. BRADLEY. Yes, sir

Mr. MACK. The power phases of the construction?

Mr. BRADLEY. The power phase that is to be repaid by revenues obtained from the sale of power.

Mr. MACK. In other words, only $600 million or thereabouts is going in to provide flood-control construction?

Mr. BRADLEY. Sir, the $1,100 million I just gave you comes out of a total that is larger than the amount Mr. Brennan gave you, because he was talking only about the Corps of Engineers, which has roundly half of the project. The total we have to account for, the combined Interior Department and Corps of Engineers project in the Missouri Basin——

Mr. MACK. That includes reclamation?

Mr. BRADLEY. Yes, sir. Is $5,375 million. That is an aggregate, grand total, long-range figure. Out of that the flood control and navigation allocation is $1,849 million. This is all long range, or what we call the ultimate plan of everything that has ever been on the drawing board.

Mr. DEMPSEY. Does the revenue from power go into the revolving fund, as does reclamation?

Mr. BRADLEY. No, sir, not into a revolving fund. The revenues from power are required to be covered into the Treasury and are not available without appropriation by the Congress. So Mr. Baldwin was correct when he was referring to the problem of this authorizing committee. You do authorize the total amount of dollars that the agencies would spend in the Missouri Basin. Any revenues go back into the Treasury and are not available for expenditure unless appropriated by Congress.

Mr. DAVIS. For power up to this date how much has been authorized by law? How much for your power interests?

Mr. BRADLEY. Mr. Chairman, the monetary authorizations for power are included in the authorizations that you have made both to the Corps of Engineers and to Reclamation for the general development of the plan. The only way to break out the amount that could be properly earmarked for power is through the so-called division or allocation of the cost of the multiple-purpose dam. It is very difficult to say, without making a special study, what part of the funds that are spent in any one year are for power, unless they happen to go for generators. If they go into a multiple-purpose dam it is pretty difficult to say what part of that went for power, flood control, navigation, irrigation, and municipal water.

Mr. DAVIS. This morning, how much additional money are you asking this committee to authorize right along the line where Mr. Brennan said it would take $200 million through 1960 for flood control?

Mr. BRADLEY. For the Interior end of it it would be the same amount of dollars—$200 million—for the same period of time, namely, through 1960 fiscal year. Again, this is in anticipation that we might get another authorization in fiscal year 1959. Our total au-

thorizations to date, which came from the Public Works Committee through flood-control acts starting in 1944, have aggregated $550 million. We have had appropriated—if I may include the amount for the fiscal year 1957 now pending before the Congress—within $4 million of that amount. In other words, $546 million have either been appropriated or submitted to Congress this year. So we are just about within $4 million of being out of authorization for appropriations. We arrive at the $200 million estimate by considering in the fiscal years 1958, 1959, and 1960 appropriations at an average amount of between $65 million a year and $70 million a year, which is what our advance schedules will call for. The appropriation this year for our activities is $56 million.

Mr. DAVIS. I am struggling a little bit here.

Mr. BRADLEY. Yes, sir.

Mr. DAVIS. Does that mean $200 million for flood control and then we have to add another $200 million for power? Is that correct?

Mr. BRADLEY. Yes; power and irrigation.

Mr. DAVIS. Power and irrigation. That would be $400 million?

Mr. BRADLEY. Yes.

Mr. DAVIS. How will that appear in the language of our act, Mr. Brennan?

Mr. BRENNAN. That was handled in the 1950 bill by a separate itemization at the end of the bill. One of the sections read approximately, "There is hereby authorized to be appropriated to the Department of the Interior for the Missouri Basin plan approved," and so forth, "a sum of $200 million in addition to that previously authorized." I believe the total of the bill as referred to did not include that amount, but just included flood control.

Mr. MACK. Mr. Chairman, I would like to ask Mr. Bradley on these reclamation dams that include power facilities, do the power operations pay back to the Government both interest and principal on the money invested in the power phases of the developments?

Mr. BRADLEY. Yes, sir. The present study on the Missouri Basin, which includes the combined operation of the Corps of Engineers and Interior Department dams and power structures, plans to pay out within 50 years at 3 percent interest the entire amount allocated to power at the going power rate.

Mr. MACK. How are payments made for the reclamation and irrigation phases?

Mr. BRADLEY. The irrigation allocation is an assessment against the water users. However, the amount of actual charges in the case of irrigation farmers is geared to their ability to repay. The amount that the irrigators are not able to repay without interest, which is the historical setup on our irrigation program, is assigned to the power revenues to be repaid from those revenues in aid of irrigation.

If I may add, sir, that is the traditional setup we have elsewhere around the country—in the Northwest, in California, and elsewhere.

Mr. MACK. Taking it as an entire national picture, do these irrigation projects pay back to the Government about all that the Government invests in them, or not?

Mr. BRADLEY. I think the direct answer is "Yes." A larger answer would, I think, properly touch on things other than the direct re-

payments to the Treasury from the people who are actually on the farms and connected to the power system. We have in mind the economic returns that have been found to arise from the establishment of irrigation developments, particularly in these less developed areas of the country.

Mr. MACK. Can you supply for the record the approximate amount of money represented by the power installations, by the reclamation installations, and by the flood-control phase of the operation?

Mr. BRADLEY. Yes, sir.

Mr. MACK. Thank you.

(The above information follows:)

Missouri River Basin Project—Ultimate plan, combined allocation of cost (including interest during construction) Corps of Engineers, Department of the Army, and Bureau of Reclamation, Department of the Interior (data from Economic Analysis, April 1955)

	Allocation of cost (in millions)
Irrigation	$2,235
Commercial power	1,144
Flood control and navigation	1,849
Municipal water	8
Recreation	16
Investigation of inactive units and related Interior programs	56
Fish and wildlife	2
Investigation of potential units	7
Future potential self-liquidating power system additions	57
Total cost to be allocated	5,375

Mr. ROGERS. Do I understand you to say on the irrigation projects you feel the local people there cannot pay for the benefits of the irrigation and you will pay part of that cost to be written off by power?

Mr. BRADLEY. Yes, sir.

Mr. ROGERS. How long has that been going on, do you say? Is that historical?

Mr. BRADLEY. It is historical and based on both law and practice. Of course, primarily on law. It is provided that in a multiple-purpose project certain elements may be allocated which are not reimbursed at all from the direct beneficiaries. To be sure they are reimbursed in the larger sense, in that you get value received. Flood control and navigation, for example, are not a direct assessment under an assessment procedure.

Mr. ROGERS. Flood control?

Mr. BRADLEY. Yes.

Mr. ROGERS. The benefits have to be repaid?

Mr. BRADLEY. I did not make it clear. Certainly the benefits warrant your investment in flood control. If you protect the property, notwithstanding that that particular property owner need not repay the cost and put it in the Treasury, there is certainly an economic return from flood control.

Mr. ROGERS. Here is what is worrying me and what I cannot get clear from your statement. I thought we went in and built a dam, for instance, and they say that all of the costs allocated to the dam for power are going to be repaid.

Mr. BRADLEY. That is correct.

Mr. ROGERS. How can that be so if you are allocating part of the irrigation cost to come out of that money to go back to pay for the power?

Mr. BRADLEY. That would be in addition to the amount to be paid to the Treasury for power.

Mr. ROGERS. In other words, over and above?

Mr. BRADLEY. Yes, sir.

Mr. JONES. I have just one question, Mr. Chairman.

Mr. DAVIS. Mr. Jones.

Mr. JONES. Mr. Bradley, the question has been raised about the funds going to the Department of the Interior for the sale of hydroelectric power. That is the general receipts of the Treasury of the United States and is not earmarked for specfic use other than to be a general revenue proposition, and it goes into the general funds of the Treasury of the United States.

Mr. BRADLEY. Mr. Jones, if I understand you correctly, that is the revenue you are talking about?

Mr. JONES. That is right. They are general receipts of the Treasury.

Mr. BRADLEY. They go into general receipts of the Treasury, but they are also accounted for under the reclamation fund.

Mr. JONES. I understand. Both funds require——

Mr. BRADLEY. There is no automatic appropriation in the discretion of administrative officials.

Mr. JONES. I understand.

Mr. BRADLEY. It goes into the Treasury and as a bookkeeping matter we are also running it through the reclamation fund. It requires specific authorization from a committee and a specific appropriation from a committee of Congress.

Mr. JONES. But you merely identified the return of the money and it is not held by the Department of the Interior for any other use?

Mr. BRADLEY. No, sir.

Mr. JONES. But as a general receipt of the Treasury of the United States?

Mr. BRADLEY. Yes, sir; identified with the reclamation fund.

Mr. ROGERS. May I ask one more question? Do you mean to tell me all of our dams that have been built are operating at quite a large profit? Is that true?

Mr. BRADLEY. Sir, the purpose of profit has no basis in our projects.

Mr. ROGERS. What I am trying to say is, there was a profit that they would pay over the construction of the dam and that can be therefore applied to irrigation so we must be making a profit?

Mr. BRADLEY. In that concept there is.

Mr. ROGERS. Could you give me some figures on that?

Mr. BRADLEY. Would it suit your purpose if I supplied an economic analysis to you of the Missouri Basin which shows the total payout?

Mr. ROGERS. Maybe that will help. Fine.

Mr. BRADLEY. Another way to put it is to say simply and in general that the power rates are required to be compensatory to the United States. The irrigation, unless specifically declared to be nonreimbursable by the Congress, is required to be reimbursed without interest. The two are combined in our projects and a payout study to balance the two functions is made up. The power with interest is certainly paid out, as was testified. Then in addition, to the extent possible and to the extent that revenues accumulate over the years, the

irrigation aid over and above that paid by the irrigators themselves accumulates and the entire reimbursable allocation is paid out.

Mr. ROGERS. I want to make clear that in many instances of irrigation the people who are benefiting are not paying it back like it is claimed; is that not true? It is being paid by the project.

Mr. BRADLEY. Of course, frequently the same region that enjoys the irrigation is also connected with the powerplant.

Mr. ROGERS. Nevertheless, the people actually getting the benefit of the irrigation say they are paying it all back and they are not getting any benefit at all. Now you tell us it is taken out of part of the cost of the dam and from the profits of the dam.

Mr. BRADLEY. It is a fair statement to say that the people on the farm are paying what they are able to pay.

Mr. ROGERS. Who is to make the determination?

Mr. BRADLEY. That is based on——

Mr. ROGERS. There is no point in going into that. I have gotten what I want to know. Thank you.

Mr. SCUDDER. Mr. Chairman.

Mr. DAVIS. Mr. Scudder.

Mr. SCUDDER. As I look over the figure you gave of $1,144 million for power as against $5,375 million for the cost of the project, it seems to me that only about 20 percent of the cost of the project is charged against the development of power.

Mr. BRADLEY. Yes, sir.

Mr. SCUDDER. I do not understand your reference to profits. As I see it, over a period of 50 years it is supposed to pay back the cost of the power development only. The other $4 billion is the charge against flood control, navigation, and irrigation. Is that right?

Mr. BRADLEY. That is correct.

Mr. SCUDDER. Then the other benefit you receive in cash would be from the sale of water for irrigation. How much of that money do you figure will come back to the Federal Government, and what do you charge to the overall project for irrigation?

Mr. BRADLEY. Based on the total plan the probable expenditure over a long period of time would be $2,200 million, which would be allocable to irrigation. The amount of repayment that is estimated from the irrigators themselves would be $385 million.

Mr. SCUDDER. In other words, pretty close to $2 billion is charged against irrigation, but never collected?

Mr. BRADLEY. Not collected from the connected water user.

Mr. SCUDDER. Yes.

Mr. BRADLEY. If I may, to emphasize for the understanding of the committee, that amount of $2,220 million proposed to be invested in irrigation is over a long period of time, running up to the year 2000. But in order to give you the total package, the so-called ultimate plan on everything that appears at this moment even reasonably subject to development, we arrive at a total figure of $2,200 million. Actually we are down at the $500 million appropriation level at the present time; $550 million has been authorized and $200 million additionally is now needed if we are to go along at about the going rate. So we are a long way from these ultimate plan figures.

Mr. DAVIS. Are there any other questions?

Mr. SCHWENGEL. I would like to have a copy of the economic report on the Missouri Basin, if I may.

Mr. MACK. Will you give us a copy of a similar report on the Columbia, if possible?

Mr. BRADLEY. Yes, sir. There is a payout plan on the Columbia and I will be very happy to furnish it.

Mr. DAVIS. Now where does Mr. Babb come in, Mr. Brennan?

Mr. BRADLEY. Mr. Babb was to back me up with any of the technical details or figures the committee might be interested in.

Mr. DAVIS. It looks like you have done a good job today and you have not needed a backstop.

Mr. BRADLEY. Thank you.

Mr. DAVIS. You have been very helpful.

Mr. BRADLEY. Thank you, Mr. Chairman.

Mr. DAVIS. Now, Mr. Brennan, will you pass to another project and maybe we can pick up just a little speed now?

Mr. ROGERS. I want to comment to say I think we have just started the investigation here on the question of a very interesting field. I know this committee cannot pursue it this morning, but I think we should. I have been told, and that is all I have ever heard, that the irrigation completely pays for itself. Then they throw off on our flood-control projects that this committee tried to authorize for the country by saying to flood control, "We are just giving you something, whereas in irrigation we have to pay it all back." I am amazed to find out what this man told me this morning, that that is not the case at all. The committee ought to go into it.

Mr. JONES. It has been going on for 40 years.

Mr. ROGERS. I think we ought to do something about it and ought to not go on for 40 years and let that impression be prevalent in the Congress.

Mr. DAVIS. All right, Mr. Brennan.

Mr. BRENNAN. Mr. Chairman, I wonder if the committee would like the table showing the basic costs, authorizations and appropriations, and estimated deficits inserted in the record, and for me to read the deficit for each one of the basins, or do you prefer me to go through for each basin the full statement on the cost, authorization, appropriations, and deficiency?

Mr. DAVIS. Let us try it that way, to start with.

Mr. BRENNAN. The first is the Connecticut River Basin. The total cost is estimated at $184,198,900. The present monetary authorization is $72,957,000. The appropriations through the fiscal year 1956 amount to $36,567,000. The present budget estimate for the fiscal year 1957 is $5,920,000.

Using our estimated appropriations for the next 4 years, there will be a deficit requiring additional authorization in this bill of 8 million.

The next basin is the Savannah River Basin, which is somewhat different from the normal basin because there the monetary authorization is limited to one single dam, the Hartwell Reservoir. It was approved in the original Savannah River Basin and authorized later specifically, but there was a monetary limitation placed on the authorization of that reservoir.

The total cost is $94,300,000. The present monetary authorization is $50 million.

Mr. SCHWENGEL. We have all of these figures before us.

I understand, but he is reading figures that are already written down. If he will just give us the additional figure, that will do it.

Mr. DAVIS. If there be no objection then, now that we have gone along slowly and carefully, if you will just take each basin and say we need this much additional monetary authoriation, that will be fine. I am just letting nature take its course this morning.

Mr. BRENNAN. Yes, sir. The additional authorization required on the Savannah River Basin for Hartwell Reservoir is $33 million.

Mr. JONES. How much of the project at Hartwell has been completed?

Mr. BRENNAN. That, sir is——

Mr. JONES. I just bring it out because in those projects that are half complete the Corps of Engineers cannot stop. The cost is going to jump out of the ceiling.

Mr. DAVIS. That is right.

Mr. BRENNAN. $4 million has been appropriated through 1956 and in the approved budget for 1957 there is $10 million. It is estimated the project would be completed in the fiscal year 1962 and about 90 percent completed in the fiscal year 1960.

Mr. SCUDDER. You still need $33 million?

Mr. BRENNAN. Yes, sir.

Mr. SCUDDER. That is on the Savannah River Basin?

Mr. BRENNAN. Yes, sir. On that Savannah River Basin I might say, Mr. Scudder, that the additional authorization of $33 million added to the present monetary authorization of $50 million would make a total of $83 million, which would be only $10 million less than the total estimated cost of the project. But in making up this table we have stuck to the policy that we would cover only anticipated appropriations through 1960. The committee might wish to consider authorizing the completion of the whole structure where there is an individual case like this which would be so near to completion in the fiscal year 1960.

Mr. DAVIS. It might be a good thing if we have them all on the same basis. It throws us off a little bit.

Mr. JONES. The presumption is in 1960 there will be another Congress.

Mr. DAVIS. Oh, yes. All right, Mr. Brennan.

Mr. BRENNAN. The next basin, sir, is the project for central and southern Florida, on which we think a deficit will exist which would be covered by an additional authorization of $40 million.

The next project is for the White River Basin, which will have a deficit of $20 million.

The next four projects on your list will not have deficits. Then we get to the upper Mississippi River Basin, which will have a deficit of $21 million.

The next is the Missouri River Basin.

Mr. SCUDDER. You are going a little fast. These are pretty big projects.

Mr. JONES. You can mimeograph them and send them to us.

Mr. BRENNAN. Yes, sir.

Mr. SCUDDER. There is nothing on the White River?

Mr. BRENNAN. Yes, sir. The White had an estimated deficit.

Mr. SCUDDER. No. That is the Arkansas. I am speaking about the White.

Mr. BRENNAN. The White is $20 million deficit.

Mr. SCUDDER. I thought the Arkansas was $20 million.

Mr. BALDWIN. You marked the wrong figure. The Arkansas does not have any increase.

Mr. BRENNAN. The Arkansas is zero. The White is $20 million. Then there are four zeros for the Susquehanna, the Brazos, the lower Cumberland, which is, incidentally, a navigation authorization, and the Ohio. They are zero. The upper Mississippi is $21 million. The South Platte is zero. The Missouri, as I said before——

Mr. SCUDDER. You said the upper Mississippi is $21 million?

Mr. BRENNAN. $21 million.

Mr. SCUDDER. The three previous to that nothing?

Mr. BRENNAN. The four previous. From the Susquehanna to the Ohio inclusive. The South Platte is zero. The Missouri is $200 million. The Sacramento is zero. The San Joaquin is $5 million. The Kaweah and Tule is $18 million.

Mr. JONES. Where are those streams?

Mr. BRENNAN. They are tributaries of the San Joaquin.

Mr. SMITH. About half of these projects are in California.

Mr. BALDWIN. In other words, the Kaweah and Tule actually join in the San Joaquin. You could have joined them in the San Joaquin?

Mr. BRENNAN. We could have if the authorization had not been specifically separated in the original acts of Congress. They could be joined in a subsequent act if a bill were drawn that way.

Mr. SCUDDER. Those three projects could be all together.

Mr. SMITH. They are all together, but it looks like California is getting all of the money. It does not look right.

Mr. JONES. I noticed the Russian River is not in here.

Mr. BRENNAN. Los Angeles Basin will have a deficit of $44 million. Next is the Santa Ana with a deficit of $3 million. Finally there is the Columbia Basin with a deficit of $112 million.

Mr. MACK. Is there some reclamation in the Columbia Basin too?

Mr. BRENNAN. Not in the basin plan being discussed here. The reclamation is covered in the Bureau of Reclamation projects and does not show up in this list.

Mr. SCUDDER. What about the Ouachita?

Mr. BRENNAN. The Ouachita, Alabama-Coosa and Arkansas navigation are all zero.

Mr. MACK. Is the Columbia slowing down the projects or continuing at about the present speed?

Mr. BRENNAN. Continuing at about the same speed. Some of the big dams will have been completed. For example, the present budget estimate for 1957 is $54 million. In the fiscal year 1958 it would contemplate approximately $50 million and the same for 1959, and then jumping to about $80 million in 1960.

Mr. MACK. What are you spending out there now?

Mr. BRENNAN. You mean in the fiscal year 1956?

Mr. MACK. Yes.

Mr. BRENNAN. I have the appropriation through 1956, but we do not have 1956 broken down here. It is approximately the same as the 1957 budget—around $60 million.

Mr. HULL. What is the total deficit, Mr. Brennan?

Mr. DAVIS. That is a good question.

Mr. BRENNAN. The total deficit is $504 million. Mr. Mack asked earlier about the remaining authorization we have as of this year. That is approximately $950 million.

Mr. DAVIS. Does that seem to satisfy the committee with regard to the information given this morning? I want to express appreciation to Mr. Brennan for the fine way in which he presented this matter.

Off the record.

(Discussion off the record.)

Mr. DAVIS. The committee will adjourn until Monday at 10 a. m.

(Whereupon, at 11:45 a. m., the subcommittee adjourned until Monday, May 14, 1956, at 10 a. m.)

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FLOOD CONTROL OMNIBUS BILL

MONDAY, MAY 14, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL OF THE
COMMITTEE ON RIVERS AND HARBORS,
Washington, D. C.

The subcommittee met, pursuant to notice, at 10 a. m., Hon. Clifford Davis (subcommittee chairman) presiding, for consideration of H. R. 8677 and H. R. 9595, which are as follows:

[H. R. 8677, 84th Cong., 2d sess.]

A BILL Authorizing a monetary contribution for the flood-control accomplishments of the multiple purpose Oroville Dam proposed to be constructed on the Feather River by the State of California

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That, in recognition of the flood-control accomplishments of the multiple purpose Oroville Dam and Reservoir, proposed to be constructed on the Feather River by the State of California, there is hereby authorized to be appropriated as a monetary contribution toward the construction cost of such dam and reservoir the sum of $100,000,000, such funds to be administered by the Secretary of the Army.

SEC. 2. Prior to making the monetary contribution authorized by section 1 of this Act, or any part thereof, the Department of the Army and the State of California shall have entered into an agreement providing for operation of the Oroville Dam in such manner as will produce the flood-control benefits upon which the monetary contribution is predicated, such operation to be consistent with the other multiple purposes of said dam.

SEC. 3. The funds appropriated under this authorization shall be administered by the Secretary of the Army in a manner which shall assure that the annual Federal contribution during the project construction period does not exceed the percentage of the annual expenditure for the Oroville Dam and Reservoir which the total flood-control contribution bears to the total cost of the dam and reservoir.

SEC. 4. Unless construction of the Oroville Dam and Reservoir is undertaken within two years from the date of enactment of this Act, the authority for the monetary contribution contained herein shall expire.

[H. R. 9595, 84th Cong., 2d sess.]

A BILL To authorize the construction of certain works for flood control and other purposes on the Sacramento River in California

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the project for navigation, flood control, bank protection, and incidental channel improvements on the Sacramento River between Chico Landing and Keswick Dam, recommended by the Chief of Engineers in his report dated January 25, 1955 (House Document Numbered 272, Eighty-fourth Congress), is hereby adopted and authorized to be prosecuted under the direction of the Secretary of the Army and supervision of the Chief of Engineers, substantially in accordance with the plans and subject to the conditions recommended in such report.

Mr. DAVIS. The committee will be in order.

We have quite an undertaking this morning. We are considering H. R. 8677, which was introduced by our colleague, Mr. Engle, of California, which authorizes a monetary contribution for the flood-control accomplishments of the multiple-purpose Oroville Dam proposed to be constructed on the Feather River by the State of California.

We have been considering projects to be considered in the omnibus flood-control bill, but I think it is the feeling of this committee, after discussions last week that this matter is of such importance that we better consider it as a separate bill and in separate legislation.

We are fortunate to have the Governor of California with us today who will be introduced formally later.

I am glad to see present this morning a number of gentlemen whom I had the pleasure of meeting early in January in Oroville and Marysville.

We were out there several days just after the damaging and disastrous floods and saw much suffering but we also saw the fine spirit on the part of the people involved. Clair Engle, Hubert Scudder, who is unavoidably detained at the moment, Frank Clark, of Pennsylvania, and myself from this committee were out there. We went from early morning until late at night in order to see as much of the project and the proposals which will be suggested here this morning as possible.

In order to expedite the matter, I will ask Congressman Engle to make the opening statement and after him we will hear from another California colleague, John Moss. Then I am going to ask our colleague on this committee, Mr. Baldwin, from California, to introduce his Governor. They are all very strong for you out there, Governor, and I want Mr. Baldwin to introduce you personally.

Mr. Engle.

STATEMENT OF HON. CLAIR ENGLE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. ENGLE. Thank you very much, Mr. Chairman, I would like to say that the people in California are very grateful for you taking your time with two other members of this subcommittee to be with us this past winter in order to make a personal inspection of the flood damage, which is the subject of the legislation before you.

There are two bills before you this morning, Mr. Chairman, H. R. 9595, and the bill to which you alluded, H. R. 8677. H. R. 9595 authorizes the works to be constructed which are reported on by the Army engineers in House Document No. 272. I believe each member of the subcommittee has before him a brief summary of that report.

I am going to deal with that matter in a rather cursory fashion because the major proposal before the committee is the one to which you alluded, Mr. Chairman, and that is the matter of the Feather River project, and there appears little disagreement about House Document No. 272, which involves a small project, though an important one for our area.

House Document No. 272 was filed with this committee on a report from the Army engineers as a result of a resolution previously adopted by this committee, and a similiar one also adopted in the Senate.

It provides authorization for channel maintenance and bank protection works between Chico Landing and Red Bluff. To identify the area on this map, it is in northern California, north of Sacramento. Chico is shown on the map, and is some hundred miles north of Sacramento. H. R. 9595 would authorize works which would cost $1,360,000. The report by the engineers, House Document No. 272, is a favorable report. All of the agencies, including all of the State agencies that reviewed the report, have passed on it favorably and also the Bureau of the Budget. According to its statement which appears at the beginning of the report on page VI, the budget says:

> I am authorized by the Director of the Bureau of the Budget to advise you that there would be no objection to the submission of the proposed report to the Congress.

As I have said, the cost of the project would be $1,360,000. The usual provisions with reference to contributions by the local people are included, including some $30,000 annually in maintenance cost.

The benefit-cost ratio is 1.43 to 1.

There are two local witnesses who are here to testify in support of this legislation, Mr. George Lindauer and Mr. Jack Bowers, and at a subsequent time they will offer to answer questions and present statements or to file their statements, as desired by the committee.

The second matter before you is bill H. R. 8677, a bill authorizing a monetary contribution for the flood-control accomplishments of the multiple-purpose Oroville Dam proposed to be constructed on the Feather River by the State of California.

This measure was introducted on January 23, 1956, following the disastrous floods in California and has the support of the Governor of California, the State engineer and, as far as I know, all of the State water agencies, and all other agencies in our State, as the most constructive and helpful single thing the Federal Government could do to prevent a repetition of the heavy toll of life and property damage which occurred in the floods this last winter.

I would say that the procedure suggested to you today is not without precedent. It was carried out on the Cherry Valley Dam by the city of San Francisco in the southern part of my district some years ago, and that dam was completed just within this past year.

The chairman of this subcommittee, Congressman Clifford Davis, and 2 other members of the subcommittee, Congressman Frank Clark, of Pennsylvania, and Congressman Hubert Scudder, of California, made a trip with me and 2 members of my committee to California this January to make a visual inspection of the flood damage. It is hardly necessary for me to go into detail on that subject, although some pictures and statistical material on the subject will be furnished by those who are here to testify.

I have provided the committee with a number of pictures which appeared in the Sacramento Bee, depicting the tragic damage which occurred in our State at that time. As of the last count, 37 lost their lives in the flood and there is still 1 other party missing. The direct losses from the flood in damages amount at least to $50 million and, of course, it is not possible at this time to tell precisely what the final damage will be because no one knows whether or not the orchards that were flooded for many days or weeks will die or be able to produce again.

The indirect damage, of course, is almost beyond calculation; that is, the expense incurred by people who had to run for their lives, the disruption to business and the normal activities of people is almost beyond calculation. No value can be put on human life.

If the city of Marysville, which is displayed in these pictures as a little sunken island protected by levees, had gone under 20 feet of waer this disaster would have been comparable to the worst that has ever occurred in the history of the country.

The newspaper which is before you depicts the city of Marysville, a community of some 10,000 people, completely surrounded by water. The water came within 6 inches of the top of levee. At the worst point of that flood the Army engineers tell us that, if that levee had broken, incalculable amounts of property would have been lost and many lives.

Obviously, something must be done to prevent a repetition of this flood. The plan which I propose and which as far as I know has the endorsement of everybody in our State (where we rarely find such agreement relating to any water control or development project) is that the Federal Government help the State start the multiple-purpose Oroville Dam the State plans to build as a part of the huge Feather River project. This bill authorizes a contribution of $100 million for the flood-control benefits of the Oroville Dam. The Oroville Dam will cost approximately $430 million and will be a multiple-purpose flood control, irrigation, and power project. It is the key unit of the State Feather River project, which will move water from the north as far south as Los Angeles and San Diego. The ultimate cost of the Feather River project will be in excess of a billion and a half dollars.

Reference to the map will indicate Oroville at a point north of Folsom, which you will see designated here in black, as the reservoir. The water from the Oroville Dam will eventually be brought south to Bakersfield which is shown on this map, over the Tehachapi Mountains into Los Angeles.

The Feather River project, of which the Oroville Dam is a part, was authorized by the State legislature in 1951, and in this last session approximately $91½ million was appropriated to initiate the land acquisition and engineering of the project. However, the program for financing the entire Feather River project has not yet been presented to or voted by the State legislature. That is the reason the contribution by the Federal Government for the flood-control benefits of the Oroville Dam is important. The State has the resources without a general bond issue to match funds with the Federal Government at more than 3 to 1 annually for the construction of the Oroville Dam. This dam will cost, as I stated, about $430 million. It will take about 7 years to build. The State can finance over that period of time out of direct taxes or moneys otherwise available, the annual amount necessary, with that supplied by the Federal Government for flood-control benefits to build this dam.

The State can then proceed simultaneously with the necessary bond issue of over a billion dollars to finance the downstream portions of the Feather River project, which will put to use the 4 million acres of stored water. In short, by doing it this way, the flood-control benefits and the revenues from power production can be realized immediately, or in the near future, while the State puts together the necessary arrangements to raise the money to finance the building of those por-

tions of the Feather River project downstream which will make beneficial utilization of the water.

I do not need to emphasize before this subcommittee that flood control has been a traditional responsibility of the Federal Government. In this instance the Federal Government is being asked to supply the money which would pay for the flood-control benefits as part and parcel of the larger multipurpose flood-control and irrigation project, the balance of which will be financed and paid for by the State of California. The strange irony of the weather in our State is that we have too much water in winter which floods us, and we are parched and dry in the summer. Therefore, instead of building single-purpose flood-control projects, it is necessary for our State to build large reservoirs so the floodwaters can be held and used in the summertime. That is what we plan on doing with the Oroville Dam, and we can get started now with the help from the Federal Government that is proposed in this bill.

I am assured, Mr. Chairman, that there is no more economical method of providing this flood control than that which is proposed in this legislation, either by separate single-purpose flood-control dams or levees, or otherwise, and that this proposal actually minimizes the cost to the Federal Government in making available this immediately necessary flood-control protection for California to prevent a repetition of the terrible floods and the tragic loss of life and property damage which we suffered last year.

Mr. Chairman, that concludes my statement. I would be glad to answer questions now or later.

Mr. John Moss, as you previously stated, wants to make a brief opening statement before you hear the next witness.

Mr. DAVIS. Do you propose to put a powerplant there at the Oroville Dam?

Mr. ENGLE. Yes, there will be a powerplant there and Mr. Banks, the State engineer, will testify in a few minutes with respect to the details of the project. However, the contribution to the State from the Federal Government is only that which relates exclusively to the elements of the project which give flood control. The State will have to supply all of the rest of the finances for navigation and the power features.

Mr. DAVIS. I should like to state that ordinarily we hear from the engineers first. We are reversing the order today because of the presence of Governor Knight and other local witnesses who have come a very great distance to be here. Then, of course, we will hear from the engineers later. I just want to advise General Itschner that I am sure we will not reach you today or any of your associates, General.

Mr. ENGLE. We often do that in my committee, Mr. Chairman.

I would say that this bill provides for $100 million for flood-control benefits. The State engineer is prepared to support the correctness of that amount, and I would add this, that we have no objection whatever to the amount being fixed on a certification by the Army engineers, whom we assume will consult with the State.

Mr. DAVIS. Are there any questions, gentlemen?

Mr. DEMPSEY. No, I think not. The gentleman has made a very good statement.

I want to ask you just one question, Mr. Engle. The flood-control feature alone would cost probably more than $100 million if you had no other multiple features connected with it?

Mr. ENGLE. This bill actually minimizes the cost of providing the necessary floood protection because it is part and parcel of a larger project, which it is necessary to build because we have to hold the water. Single-purpose dams, as you know, Governor, can be built much smaller, because they catch the water and then release it.

When we want to hold water for use in the summertime, we have to build capacity large enough in the reservoirs to catch the water and also be prepared to catch the next flood.

Mr. DEMPSEY. As to irrigation, does the State pay for that?

Mr. ENGLE. Yes, the State of California will pay for that out of its funds. This dam will cost $430 million, and we are asking the Federal Government for $100 million to pay for the flood-control portion, and the State contributions are on the basis of more than 3 to 1 compared to that of the Federal Government to meet the amount necessary to build the additional storage dams, the powerhouses, and so forth, under the multiple-purpose features of the project.

Mr. DAVIS. Mr. Mack, do you have any questions?

Mr. MACK. Is not this project quite similar to the partnership arrangements in the Pacific Northwest where the Federal Government supplies the money for flood control and the local interests, the State, local public utilities, or private power, supply funds for the power features?

Mr. ENGLE. I would say that it goes even further than that because, in this instance, the Federal Government will be putting up the small end of the money. My observation is that the local proportion is ordinarily less than this.

In this instance, the State will pay the balance of the $430 million necessary to build this project, and this bill provides that the money shall be matched on a 3-to-1 basis annually. In other words, in this instance, the Federal Government is not asked to put up its cash, and then maybe the State will do it. Under the terms of this bill, as provided in section 3, the Federal Government puts up $1 and the State puts up $3 which assures, of course, the construction of the project in accordance with the plan.

Mr. MACK. And, in addition, California takes care of the irrigation phases of the development?

Mr. ENGLE. That is correct, and downstream eventually that will cost the State of California approximately $1 billion. This is a tremendous project, but this proposal enables us to get it off the ground. It started because we can start the first unit while the State is arranging financially for those portions which must be built downstream for the utilization of the water.

Mr. DAVIS. Are there any further questions?

Mr. SMITH. This a State project. You are asking the Federal Government to pay you for the flood control and to accept it as a Federal responsibility by contrast with the other types of proposals which are clearly Federal projects. Here it is proposed that the larger part of it be put in private or local hands?

Mr. ENGLE. I would say that is generally correct. We are asking the Federal Government to put up the money for the flood-control benefits of this particular dam rather than building something else

in the nature of either single-purpose flood-control dams or in the nature of levies. Then we go ahead and build a huge multiple-purpose project which gives us the maximum utilization of the water.

Mr. DAVIS. Do you have any questions at this time, Mr. Baldwin?

Mr. BALDWIN. No, thank you, Mr. Chairman.

Mr. DAVIS. Mr. Wright?

Mr. WRIGHT. No, thank you.

(The following statements were submitted by Mr. Engle:)

STATEMENT OF MR. EARL S. LINDAUER, TEHAMA COUNTY EROSION AND FLOOD CONTROL ASSOCIATION OF TEHAMA COUNTY, CALIF.

Mr. Chairman and gentlemen of the committee, I am Earl S. Lindauer, a fruit and nut grower of the Los Robles and Los Molinos area of Tehama County. My farm or orchard borders the Sacramento River. It has been my sole lifetime work to develop this property from raw river bottomland covered with native vegetation to its present high productive state producing walnuts, almonds, and prunes. You, therefore, can appreciate my interest in the matter before you. I have been sent here by the landowners along the Sacramento River and the supervisors and people of Tehama County to offer what I can in the way of assistance to you and your committee and to our Congressman, Mr. Engle in the consideration of House Document 272.

You have before you in printed form a very exact and precise report on the problem of the Sacramento River between Chico Landing and Red Bluff. It has had a long and profound study by a very large group of extremely able people and technicians over a long period of time. There have been many reports on the matter. We feel that the conclusions and recommendations are complete and ably presented in this report. We also feel that it would be a duplication and serve no useful purpose to further elaborate on the technical aspects of the problem at this time.

There are no objections to this work by any authority or group within the State of California. All authorities that need to pass and recommend it have done so. Within the three counties most affected, namely Tehama, Butte, and Glenn, there is complete and unanimous endorsement. All of the boards of supervisors, the planning commissions, the farm bureaus, the public works commissions, the soil conservation districts; all of the civic bodies and the citizenry are in complete accord.

On the national level we have been assured of support and interest by our Congressman and Senators, whose interests lie in the northern regions. We further feel that no stone has been left unturned, that should be turned. Any information required, we have supplied. Mr. Engle's files are most complete. If something has been omitted that you require we are here at your pleasure to supply it to the best of our ability.

This region like the rest of California, is undergoing a rapid and almost unbelievable development. The requirements of the past are no longer sufficient. Tomorrow is a new day and we must plan and act accordingly.

We are not unmindful of the many demands made upon the Congress for help and support, but surely gentlemen, surely as the sun rises and sets the Congress will never make a sounder investment in the interest of the national economy than the investment that we herein ask you to undertake.

Along the Sacramento River, in these three counties, lies untold and continuing wealth for this and all future generations, land rich beyond the dreams and comprehensions of the average mind. Nature needing but the assistance of man and materials to help in confining and minimizing the damage wrought by the turbulent Sacramento River. Along these lands 9 million acre-feet or more of water pour into the lower valley annually. It is beyond the scope and financial ability of the relatively few individuals working and farming along this mighty river to do the job single-handed. They are an independent and hardy group, believing as they do, that the Lord helps those best who help themselves most, and to this extent they have poured their resources and strength into protective works as they were able. A study of the flood data and material contained in the report will readily convince any fairminded person that because of the magnitude and nature of the problem Federal help is needed.

These conclusions are supported, detailed, and recommended most ably in the report and study before you.

I have with me a limited amount of material and some correspondence accumulated over the years. If the committee will indicate what information and data it desires to place in the record, we will do our utmost to supply it.

We are endeavoring today as time allows to give you a broad picture of the problem, the land and the people.

We have worked many long and hard hours on this problem over the years. Our future, our homes, our children, and our communities are vitally concerned with the actions this committee takes on House Document 272. May we ask your earnest consideration.

The hopes and prayers of our families and communities are that this committee will see fit to take affirmative action and so to recommend its passage to the Congress.

STATEMENT OF MR. JACK BOWERS, SACRAMENTO RIVER LANDOWNERS' COMMITTEE OF BUTTE COUNTY, CALIF.

INTRODUCTION

I am Jack W. Bowers, a member of and representing the Sacramento River Landowners' Committee of Butte County. My presence here and my message are endorsed by the Butte County Supervisors. I am a rancher. The Bowers Ranch borders the Sacramento River for 13,000 feet.

The problems that exist on the Bowers Ranch and the work that is being done to cope with these problems is representative of what might be found at various points on the river.

Among the equipment that is working right this moment at Bowers Ranch expense is one of the largest tractors in the world which is dragging giant oak trees and placing them on the riverbank for protection against erosion. This work is being done in accordance with recommendations of the Army Engineers. Another project is a 7,000-foot levee which will be built this fall under a pooling agreement whereby some neighbors will share the expense.

NO FURTHER NEED FOR DELAY

The need for bank protection in the area from Chico Landing north as well as south has been known for many years. Only two reasons for its not having been done have been brought to my attention.

1. Lack of agreement as to what should be done. That has been eliminated by the wording of House Document 272 as it now stands. No objection is being raised by anyone in Butte County now, to anything in House Document 272.

2. Land values were felt to be less in the upper reaches of the river. This misconception probably stemmed from land use. Much of the land is underdeveloped because of the threat of erosion. However, the potential here is greater than anywhere in the world. The soil on both sides of the river from Chico Landing to Red Bluff is classified by the United States Department of Agriculture as Columbia loam and Columbia very fine sandy loam. Further study of this classification indicates that it is rich topsoil all the way down to the gravel strata below.

Because these recent alluvial deposits were laid down by relatively fast-moving water, the particle size is slightly larger than that of soil farther downstream. This results in lack of clods when the land is plowed wet and lack of cracks when the land is left exposed to the summer sun. These qualities mean less man-hours per ton of food produced.

DAMAGE

Every minute that is lost in getting the bank protection work done is a loss to posterity. The erosion is going on winter and summer, flood and drought, as long as water is released from Shasta Dam. Greatest erosion takes place when the level of the river is just a little below the level of the land. It is the surface of the water that does the cutting. Releases from Shasta Dam hold this level at the point where it does the most damage to riverbanks, the landowners believe.

Between $45,000 and $50,000 damage was done to county roads by last winter's floods, the county public works director estimates.

A neighbor's land lay in the path of the river when it changed course. Now 115 acres of his land is an island in the river, inaccessible and useless (but still subject to tax.)

The river threatens to break out of its bank at Wilson Landing Bend and go downhill (12 feet per mile) to the Pine Creek Trough and down that trough, across State Highway 32, rendering the Gianella Bridge useless and necessitating its duplication at a cost of roughly $1 million.

A point has been made that the river is building up the land in some places, offsetting losses elsewhere.

These places are usually densely wooded areas where the cost of clearing and leveling are prohibitive, therefore, the buildup has little value.

CONCLUSION

Some places the force of the river against the bank is so great that adequate countermeasures are beyond the means of the local landowners, and Government action is indicated.

The people I represent like to be able to do things for themselves. However, in the present instance they, or rather we, are forced to humble ourselves and ask you to help us by passing House Document 272.

(The following letter from Mr. Gubser favors H. Doc. 272:)

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D. C., May 14, 1956.

Hon. CHARLES A. BUCKLEY,
Chairman, Public Works Committee,
House of Representatives,
Washington, D. C.

DEAR MR. CHAIRMAN: I should like to be recorded as strongly favoring House Document 272 which is before your committee today. I consider the work authorized in this proposal to be most necessary and I strongly favor it.

Yours sincerely,

CHARLES S. GUBSER.

Mr. DAVIS. We will hear you next, Mr. Moss.

STATEMENT OF HON. JOHN E. MOSS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Moss. Mr. Chairman and gentlemen of the committee, in the interest of conserving both the time of the committee and affording an opportunity for those who have come here from California to present their views, I am going to be very brief and ask permission to file an expanded statement later on.

I want first to support fully the request of my colleague, Clair Engle, on the need for the authorization provided in H. R. 9595 on bank stabilization on the Sacramento from Chico Landing to Red Bluff. At Eastertime I was back in my district and I had an opportunity to travel over this section of the river and observe the great property damage which had resulted as a result of the lack of proper channel clearance and bank stabilization in this area. Considerable acreage has gone into the river and it will continue to go in there until some affirmative program is launched to stabilize those banks.

The benefit-to-cost ratio is high.

The project has been studied and approved both by the engineers and by the Bureau of the Budget.

I cannot overemphasize the importance of early work in this area if we are to prevent further substantial loss of highly productive acreage along the Sacramento River.

I want to also support H. R. 8677 which was introduced by Congressman Engle.

As I have said, the reason I have not introduced a bill myself is because I felt I could give as effective support to legislation introduced by my colleague and neighbor in California, Mr. Engle.

During my service in the State legislature, I had a major role in bringing about State authorization of the Feather River project.

In scope, it is probably the largest project under active planning in this Nation, if not in the world, today. It will provide protection to communities and to a number of communities, but to two communities in my district, which those of you who visited them in January realize were seriously damaged, Marysville and Yuba City. You saw the great impact of the floods in one part of the Third District which I am privileged to represent. The total figures on the damage resulting vary. Subject to documentation, there were over $600,000 of direct-flood damages in my area. There is also other damage that is going to be felt for many years and severe economic losses to the people that I represent.

This is the type of partnership which I feel all of us can, in good conscience, support.

It represents Federal assistance in a field which has historically been recognized as a Federal responsibility, that of flood control. It will permit the State of California to proceed a little more rapidly on the construction of this great project. It will give assurance to people who are considerably disturbed at the moment that active steps will be taken to protect them from the ravages of floods such as the one experienced in December and January.

Congressman Engle mentioned the fact that we have the problem of too much water all at one time and too little for the long dry periods, experienced in our State.

I think an illustration of that might be that during December and January we certainly had too much water, as you, Mr. Chairman, realized after your visit, and yet in the month of March we had the driest period in 107 years, which is a perfect example of the extremes experienced in this region. Here is an opportunity for us cooperatively to undertake a project which will protect us from floods and continue to provide water during the long dry periods in California.

The Governor of our State, other State officials and local witnesses, can and will give you in greater detail some of the immediate problems and some of the benefits which can accrue both to the Nation and to the people of California from an undertaking of this type.

Mr. Chairman, that will conclude my formal remarks.

Mr. Moss. Thank you.

Mr. DAVIS. Are there any questions from either side at the moment?

Thank you, Mr. Moss that was a very good statement.

Governor, we are very proud of our colleague from your State, Mr. Baldwin. He is punctual and he never misses a session of this committee. He is an intelligent and conscientious worker. It is our pleasure to have him introduce you at this time.

Mr. Baldwin.

Mr. BALDWIN. Mr. Chairman, and members of the committee, I think the fact that the Governor is here today is an indication of how great an interest there is in the State of California in this particular project.

I know that no one knows on this committee better than the chairman, my colleague, Mr. Scudder and Mr. Clark, who went out there, what a focal point of the whole Nation in the middle of Christmas week, 1955, California was, and particularly the areas which were affected by the flood, the areas which will be given protection by this particular project, the Feather River project.

The Governor has been very much interested in this problem. He called a special session of the legislature in the State of California early this year so that the legislature could consider it on an emergency basis.

The whole State of California collectively has been interested in it because of the size of the project and the ramifications of it. As I say, the fact that the Governor is here today is an indication of his great interest in this measure. He has a plane waiting so that he can leave at noon today to return to California.

Gentlemen, it is a real pleasure and a great honor to introduce our Governor, of whom we are very proud in the State of California, Gov. Goodwin J. Knight.

STATEMENT OF HON. GOODWIN J. KNIGHT, GOVERNOR OF THE STATE OF CALIFORNIA

Governor KNIGHT. Thank you very much, Mr. Baldwin.

Mr. Chairman and gentlemen of the committee, I am grateful for this opportunity to add my word in support of this legislation.

As Congressman Baldwin has said, the Chairman, Mr. Davis, was with us during the very height of the flood damage. He can tell you much about it, and I am sure the State will soon begin work on the construction of this dam and reservoir as part of the Feather River project.

The Feather River project, as has been said by Congressman Engle is a multiple-purpose development for water conservation, for the development of power, for flood control, and for irrigation.

This project will permit the distribution of conserved waters to areas of need, including the Feather River drainage basin and its valley flood plain, as well as the vast San Joaquin Valley and the metropolitan areas in and adjacent to Los Angeles and San Diego.

You gentlemen flew over this part of the area in the wintertime and saw it, and so you are familiar with the actual physical topography. This giant program will get underway immediately to provide urgently needed flood control on the Feather River flood plain and to provide a comprehensive water resources program to aid us in solving our steadily increasing water problems.

As Mr. Engle said a few minutes ago, I called a special session of the California State Legislature less than 90 days ago to appropriate $9,350,000 for the purpose of acquiring rights-of-way and for the preparation of contract plans and specifications for this tremendous undertaking. I estimate that the cost of the entire Feather River project will exceed $1,500 million. The Oroville Dam and Reservoir alone, exclusive of the power facilities, will cost in the neighborhood of $430 million.

We hope to award construction contracts for the preliminary work within the next 6 or 8 months. These preliminary contracts will cover

the relocation of the State highway and the Western Pacific Railroad, around the reservoir area. Construction of the dam should be sufficiently advanced by the year 1962 to permit operation for flood-control purposes.

Thus you see there are still a number of years ahead of us where we will be in danger of the repetition of the disaster of last winter.

The need for flood protection along the Feather River in the Sacramento Valley of our State has long been recognized. The first steps toward providing flood protection came through the adoption of the Sacramento River flood-control project by the Federal and State Governments. Members of this committee are familiar with this system of leveed river and bypass channels and appurtenant improvements which convey the floodwaters through the Sacramento Valley to tidewater at the head of the San Francisco Bay system. However, these works were conceived many years ago, when we were a relatively undeveloped State, and provided protection against floods which might be expected to occur on an average of once every 25 years.

There is a letter in our State Capitol which describes how Governor Stanford, who later became United States Senator, and who was founder of the State university, went from his home in a rowboat on occasion.

As our State grew and the valley became more intensively developed and heavily populated, a higher degree of flood protection was necessary. The engineers of our Federal and State agencies agreed that such additional protection could best be provided through the construction and operation of multipurpose reservoirs on the major streams. Through the construction of Shasta Dam on Sacramento River and Folsom Dam on American River, by agencies of the Federal Government, a relatively high degree of flood protection has been provided to the lands and communities adjacent to those tributaries of the Sacramento River system.

Today the Feather River stands as the next major stream in the Sacramento Valley along which flood protection is urgently and vitally needed.

This flood control need was tragically and dramatically demonstrated on the day before last Christmas. Two major levee failures along Feather River caused the loss of 37 lives and destroyed more than $50 million worth of public and private property. This damage estimate includes losses of trees within the high developed Peach Bowl of our State. However, the full extent of the orchard damage, as explained to you by Congressman Engle, is not apparent at this time, and its magnitude will not be fully known until after this or even subsequent fruit-bearing seasons.

There have been other major floods on the Feather River. The flows of these floods would have equaled or exceeded the capacity for which the levee channels are designed. These floods occurred in 1907, 1909, 1928, and 1937. Levee failures occurred during each of these floods and even during lesser floods but conditions were not entirely comparable to the present situation because of continuous improvements which have been made in the levee system.

Neither is a statement of actual damages which occurred during these floods representative of present and future conditions. The estimated market value of lands and improvements in the 300,000-acre

area subject to inundation from Feather River last year was $400 million. In other words, the cost of our dam is only equal to the amount of property which was either destroyed or severely damaged last year. Our studies show that the average rate of increase of market value has been about 4 percent per year during the last 25 years. If we assume that the incremental rate of development for the next 25 years would be only half that of the past, the market value of the area to be protected by Oroville Dam and Reservoir will be $650 million in 1980. If we again reduce the rate of increase in value for the next 25-year period by one-half, the market value by the year 2005 will be $830 million. This 50-year period is submitted only as an index and corresponds to that usually employed in computing amortization of costs and benefits of multiple-purpose projects.

Now, the hard, cold facts are that the highly developed areas along the Feather River may be subject to a disastrous flood even on an average of once every 25 years. Obviously, in a rapidly expanding economy such as exists in our State, a recurrence of the flood of last December would cause much greater damage, suffering and loss of life.

The national flood-protection policy was forthrightly expressed by the Congress in the Flood Control Act of 1936. The Corps of Engineers in its comprehensive report, recommended the construction of flood-control storage on Feather River and its proposal was presented in House Document 367, 81st Congress, last session, but it was not, of course, authorized at that time. Subsequently, the United States Corps of Engineers, the United States Bureau of Reclamation, the State division of water resources made a joint review of the flood-control and water-conservation requirements for the Feather River. The joint finding of these public agencies was that the construction of a multiple-purpose dam at the Oroville site is the most feasible and economical means of accomplishing the desired result on Feather River.

In 1951, the California State engineer issued a report, which was adopted by our legislature, for the construction of the Feather River project by the State as the initial unit of the California water plan. I should like to add that although this dam was not authorized in 1951, because of the pressure of many other things needed in our State which you gentlemen are thoroughly familiar with, I am sure, even in suggesting studies, that nothing was done by way of appropriating money for the commencement of the Feather River project until 1956, when I went before my legislature, and requested that they actually appropriate some money. This has been for many years one of those projects which everybody was for but nobody really did much about. We actually got $9,300,000 appropriated and the only reason for that amount being so small as it is, in view of the tremendous size of the project, is because that is all the money that we can spend between now and the opening of our legislature which occurs in January 1957. At that time, I confidently expect to proceed with a request of the legislature for additional funds for construction purposes and by way of interest to you gentlemen who do not live in California, let me say that we will not be compelled to get our money for this out of general funds, nor out of a bond issue. In the closing days of our session, in April of this year, the State of California was the recipient of $120 million from the city of Long Beach in one check for the settlement of a dis-

pute involving revenues from the tidelands in that area. The city of Long Beach received $51 million and we received $120 million in cash, and we will receive about $15 million annually from those tideland revenues for some determinable period ahead of us.

So, you see, we are in a position to proceed. The legislature earmarked that fund not for general purposes but for the conservation and development of natural resources of the State, and, of course, nothing is more within the category of natural resources than our own water development.

Now, that report, speaking of the California water plan, included tentative operating criteria in the interest of flood control. Our studies show that all floods of record, including that of last December, or even of much greater peak discharge, could have been regulated to nondamaging flows.

A slight change in storm sequence last December, a condition which the United States Weather Bureau advises us could easily have occurred, would have produced a much greater flood and a disaster of unbelievable proportions. In our reports, we have proposed the reservation of 500,000 acre-feet of storage space for flood-control purposes, and a maximum rate of release of 100,000 second-feet, compared to the maximum measured rate of unregulated flow of 230,000 second-feet. Only 350,000 acre-feet of space would have been required to control last December's flood. Last December's experience indicates that with the operation of the Oroville Dam, we could safely release 125,000 second-feet controlled flow and the operation of Oroville Reservoir will thus provide protection against a flood with a probable frequency of occurrence of once in nearly 200 years.

Any estimate of damages that might be incurred by a major flood on Feather River must be predicated upon an assumption concerning the location of a levee failure. In view of our recent horrible experience, and on the basis of the frequency with which such floods might occur, I believe that the recommended congressional allocation in the interest of flood control is entirely justified. The State of California is ready and willing to meet its obligations on the Feather River project.

I assure you, gentlemen, that I will press for development of these facilities to provide the needed flood control and water conservation. I urgently request this committee to give favorable consideration to H. R. 8677.

Of course, I am very grateful to you for your kind attention, for your consideration, for your wholehearted sympathy and good will extended to us, not only last December, but since that time, and for your very great courtesy in permitting me to make this statement and then leave, in order that I may return to California today.

Mr. DAVIS. Thank you, Governor, for your very splendid statement, and I thank you for Mr. Clark, Mr. Scudder, and myself, for your very cordial reception when we came to your State in January.

I shall never forget being with you in your office in the Capitol about midnight working on this very serious matter. It is revealing to know that a State like yours has such considerable wealth and that you can speak with confidence about the future and what you intend to do about the conservation of your resources.

Do you have any questions, Mr. Dempsey?

Mr. DEMPSEY. No; I have no questions, Mr. Chairman.

Mr. DAVIS. Mr. Smith?

Mr. SMITH. No, thank you, Mr. Chairman.

Mr. DAVIS. Mr. Mack?

Mr. MACK. Governor, what will be the capacity of this dam for hydroelectric power production?

Governor KNIGHT. I cannot give you those exact figures. I have, of course, some very general idea of that capacity, but Mr. Banks, our State engineer, is here and he has the exact figures on that, and since a record is being made, I would prefer that he should read from his own report on that.

Mr. MACK. Thank you.

Mr. DAVIS. Mr. Wright?

Mr. WRIGHT. I have no questions to ask, Mr. Chairman, but I should like to congratulate the Governor as well as our colleagues, Congressman Engle and Congressman Moss, on the very excellent statements that they have made.

I think that they have made it abundantly clear that this project is indeed justified.

Mr. DAVIS. Governor, just as a matter of interest, can you say offhand how many miles it would be from Oroville, from this dam, all of the way down to Los Angeles?

Governor KNIGHT. To the city of Los Angeles?

Mr. DAVIS. Yes.

Governor KNIGHT. It would be in the neighborhood of 425 miles—it is 400 to Sacramento, so it would be in the neighborhood of nearly 500 miles.

Mr. DAVIS. It is interesting to the Chair to recognize as to this water which is impounded up there at Oroville, where you develop power, that you then use that water all of the way down, 500 miles away, and, in the meantime, that you are using some of it for irrigation purposes, and then in Los Angeles, you will very likely use some of it for drinking water.

Governor KNIGHT. Yes. Our dry counties are Santa Barbara, Yuba, Sutter, San Bernardino, and Ventura.

Los Angeles is not now in need of water. It will be 15 or 20 years before they have need for additional water. They are getting water now from the Colorado River and the Owens River, but the day may come when they will be as dry as San Diego. San Diego had 2.57 inches of rain in January which is very dry indeed.

In the last decade, I have been in Ventura County when I was denied drinking water in the restaurants. You drank beer, wine, or milk, but you could not have water.

Mr. DAVIS. Of course, San Diego is still farther south than Los Angeles.

Governor KNIGHT. Yes; San Diego is 130 miles farther south.

Mr. BECKER. Mr. Chairman.

Mr. DAVIS. Mr. Becker.

Mr. BECKER. I would like to compliment the Governor on his very fine statement. I would also like to compliment our colleague, Clair Engle, on his statement.

Governor, I would like to remind you that I had the pleasure of meeting you in 1949 at Camp San Luis Obispo when General Clark was there.

Governor KNIGHT. Yes, I remember it very well. You remember General Clark being a very tall gentleman. He jumped over the side of the jeep at that time. I would not let a soldier outdo me, so I did the same thing.

Mr. BECKER. Yes; I remember that. You almost landed on your head instead of your feet.

I was very much interested in the $120 million that the State received in tidelands money.

Governor KNIGHT. I can safely talk about that here now because the tidelands bill is all through the Congress and signed by the President.

Mr. BECKER. We supported that and I want to see how this money is going to be used. I am glad to see the State will use it for progress in the State. I think it is wonderful all those States in the South will get the tidelands money.

Governor KNIGHT. I am grateful to the Congress of the United States, like all Californians are, for the tidelands legislation which was passed and signed by the President and became law. We are not too affluent, I should not overdo this thing. This was an accumulation of moneys which Long Beach had had for all the long years the matter was under consideration by the Congress, so that we do not get $120 million every year.

Mr. BECKER. One question I would like to ask, I presume it will be developed later, and that is the ratio of $430 million to $100 million of the Federal money that is needed. I presume that will be developed later.

Governor KNIGHT. Yes; and the dam will cost $430 million but the project will involve pumping facilities, erection of various buildings and installation of extensive canals and reservoir at San Luis on the western side of Fresno County and all will bring water to the southern part of the State.

Mr. BECKER. That is all.

Mr. ROGERS. Governor, I find our States, California and Florida, have many things in common.

Governor KNIGHT. Senators Smathers and Holland supported tidelands.

Mr. ROGERS. And also our sunshine, oranges and our flood control problems. I want you to know that representatives from there are certainly conscious and are going to consider all projects most favorably and particularly with the interests of you and our colleagues, John Moss and Clair Engle.

Governor KNIGHT. Thank you, Mr. Rogers.

Mr. DAVIS. Thank you for coming.

I will ask Mr. Engle if he will present the witnesses in order, starting with Mr. Leonard.

Mr. ENGLE. We have Mr. Banks, the State engineer, who has a statement which I think will take about 10 minutes. Mr. Harvey Banks is State engineer and will supply some technical information requested by the committee.

Mr. DAVIS. Very well.

STATEMENT OF HARVEY O. BANKS, STATE ENGINEER OF CALIFORNIA, ACCOMPANIED BY WALTER G. SCHULZ, ASSISTANT STATE ENGINEER OF CALIFORNIA

Mr. BANKS. It is a pleasure and privilege to be here today.

I am Harvey O. Banks, State engineer of California and also secretary and engineer for the State Water Resources Board. Mr. Walter G. Schulz, assistant State engineer, who is an expert on flood control in California, is here with me.

Mr. DAVIS. You may proceed.

Mr. BANKS. Governor Knight has told you of our program to control the Feather River and you, Chairman Davis and Mr. Clark and several other members of your committee saw firsthand the havoc wrought along that river during the floods of last December. We in California deeply appreciated your interest and concern during the height of that disaster. We now appreciate this opportunity to appear before your committee in support of H. R. 8677.

Your visit also makes my job easier. In the interest of time I will eliminate any geographical discussion and turn directly toward flood control and flood prevention along the Feather River. Our flood problems are described in our report entitled "California Floods of December 1955" which I submit for your information and files. We have several copies with us and I think you will find it of interest in your deliberations on this matter.

There are many urgent flood control problems in California but the Feather River stands as the number one problem at this time. We have over here, if the committee wishes to refer to it later, a map which shows the flood plain area and the flooded areas of the Feather River.

The State engineer, in a report to the legislature in 1931 on the State water plan, which embodies the Central Valley project, recommended that flood control storage space be reserved in a multiple-purpose reservoir on Feather River near Oroville. It was proposed that 521,000 acre-feet be allocated to control the flow to 100,000 second-feet release.

The Corps of Engineers and the Bureau of Reclamation in their comprehensive reports of 1945 on the Central Valley of California recommended storage on Feather River for flood control and other purposes. The proposal of the Federal agencies at that time was to construct two dams, one at the Bidwell Bar site on the south fork and the other at the Big Bend site on the north fork. The total space to be reserved was 515,000 acre-feet and the maximum rate of release was to be 119,000 second-feet.

This proposal for two dams might appear to be in conflict with the State's plan for a single dam on the main stream at the base of the foothills. In order to clarify this point I wish to quote in part from the report of the Chief of Engineers dated July 27, 1948, and contained in House Document 367, 81st Congress, 1st session as follows:

> 16. In his supplemental report of June 1, 1948, the district engineer comments upon the possibility of providing necessary flood-control storage on the main stream of Feather River * * *. If more complete information indicates the economic feasibility of the main-stream reservoir, it would serve all purposes better than would the Bidwell Bar Reservoir with its complimentary Big Bend Reservoir, which would eventually be required * * *. Accordingly, it is believed

that the authorizations for these streams should be sufficiently flexible in order that the best projects may be constructed when complete information is available.

Continuous study of the Feather River was prosecuted diligently by Federal and State agencies and on October 10, 1949, a joint statement was issued by the District Engineer, Corps of Engineers; regional director, Bureau of Reclamation; and the State engineer of California which set forth the position that the so-called Oroville site on the main stream was the most advantageous and feasible location for storage on Feather River. I wish to submit a copy of that joint statement for the record, because it sets forth the joint views of the Federal and State agencies.

Mr. DAVIS. It may be made of the record at this point.

(Information referred to follows:)

JOINT STATEMENT OF DISTRICT ENGINEER, CORPS OF ENGINEERS, DEPARTMENT OF THE ARMY; REGIONAL DIRECTOR, BUREAU OF RECLAMATION, DEPARTMENT OF THE INTERIOR; AND STATE ENGINEER OF CALIFORNIA, WITH REFERENCE TO PLANS FOR THE CONTROL AND UTILIZATION OF THE WATERS OF THE FEATHER RIVER, CALIF.

This statement is issued jointly by the district engineer, Corps of Engineers, Department of the Army; regional director, Bureau of Reclamation, Department of the Interior; and the State engineer of California, for the purpose of informing the public and parties interested in the development of the water resources of the Feather River of the conclusions reached as to the location and amount of reservoir capacity to be constructed on the Feather River as a major unit of the comprehensive plan for the control and utilization of the waters of the Sacramento River Basin for beneficial purposes.

THE FEATHER RIVER

The Feather River is the most important tributary of the Sacramento River. It has a drainage area above Oroville of about 3,600 square miles. The annual runoff of the stream at Oroville varies from a mean of about 4½ million acre-feet to a minimum of 1,200,000 acre-feet and a maximum of twice the mean, with flood flows ranging up to 230,000 second-feet. This mean annual runoff represents about one-fifth of that of the entire Sacramento River drainage basin above the valley floor. It is apparent, therefore, that large reservoir capacity is required to regulate the magnitude of such erratic flows, to prevent flood damage and to conserve the waters for beneficial purposes; namely, domestic, irrigation and industrial supplies, navigation, salinity control, production of electric power, and other uses. A substantial part of the surplus waters of the Sacramento River Basin lies in the Feather River area. Since only one-third of the mean annual runoff of the Feather River will be required to supply the ultimate water needs of its immediate service area when properly controlled and utilized, the remainder, as far as practicable, would be conserved for exportation to areas of deficient water supply.

STATE AND FEDERAL INVESTIGATIONS

The State engineer, following several years of investigation, recommended in his report to the legislature of 1931 (bulletin No. 25), as a unit of the State water plan, the construction of a dam at the Oroville site which would impound 1,705,000 acre-feet of water. This plan was adopted by the legislature of 1941. The Oroville dam site is located on the main river, below the junction of the North, Middle, and South Forks, and about 5.5 miles upstream from the city of Oroville.

The two reports of the Secretary of Interior and of the Chief of Engineers, United States Army, dated 1945, set forth a plan for the control and development of the waters of the Sacramento and San Joaquin River Basins. Both of these reports include as units in their respective plans, Bidwell Bar reservoir, capacity 1,200,000 acre-feet on the Middle Fork of the Feather River, and Big Bend Reservoir, capacity 1 million acre-feet, on the North Fork in lieu of the Oroville

Reservoir recommended by the State engineer. These Federal reports found that the estimated required reservoir capacity could be obtained more economically at the Bidwell Bar and Big Bend sites than at the Oroville site.

The State, in expressing its views and recommendations on the Federal reports, stated that, "These projects (Bidwell Bar, Big Bend, and Greenville Reservoirs and three power afterbays) should be deferred until a thorough study has been made of their economic justification and until a further investigation has been made of all reservoir sites including the Oroville site of the State water plan. Reservoir capacity, in addition to existing capacity on the Feather River, should aggregate not less than 2,500,000 acre-feet for the full practicable development of the river."

Following the submission of these comments of the State, extensive work was done by the Bureau of Reclamation in exploring the foundation conditions at the Oroville site. These conditions were thoroughly examined and reported upon by competent geologists of the Federal and State departments involved. The foundations are considered to be saisfactory for the construction of a dam to the heights studied. In addition to that work, the Bureau of Reclamation has prepared new topographic maps of the dam and reservoir sites (Oroville, Bidwell Bar, and Big Bend) which are much more accurate than those used in the earlier studies. The new survey covering the Big Bend site revealed that the capacity at that site would be only about six-tenths the capacity used in the 1945 Federal reports, or about 600,000 acre-feet. This adversely affected the economics of that project materially. It resulted in an aggregate storage capacity of about 1,800,000 acre-feet instead of the 2,200,000 acre-feet stated in the 1945 reports. Furthermore, this reduction of capacity is on the North Fork of the river, which has a substantially larger runoff than the Middle Fork.

Further intensive and comprehensive studies have been made by the three Federal and State agencies, utilizing the new and additional data available on the foregoing Feather River dam and reservoir sites. These studied have resulted in certain definite conclusions.

CONCLUSIONS

With reference to the development, control, and utilization of the water resources of the Feather River in California, the following conclusions are reached:

1. The Feather River above Oroville with a mean annual runoff of 4½ million acre-feet, represents one-fifth of the runoff of the entire Sacramento River Basin; and a substantial part of the surplus waters that may be developed over and above local needs could be made available for exportation to areas of deficient water supplies. Therefore, these waters should be conserved and utilized to the fullest practicable extent in planning for the development of the waters of the State.

2. Large surface reservoir capacity at or near Oroville is required to control and conserve the erratic streamflows which range from a minimum annual runoff of 1,200,000 acre-feet to a maximum of 9 million acre-feet, with floodflows ranging up to 230,000 second-feet.

3. The reservoir capacity on the lower Feather River should be between 2,500,000 and about 3 million acre-feet, for the purpose of properly controlling its floodwaters and conserving such waters for beneficial purposes.

4. The most advantageous and feasible location for constructing storage capacity of 2,500,000 to about 3 million acre-feet is at the Oroville site, about 5.5 miles upstream from the city of Oroville. The dam site is suitable topographically and the fundation conditions at the dam site are considered satisfactory for construction of a reservoir to such capacity.

5. Further studies should be directed immediately to (*a*) formulating a plan for the construction of reservoir capacity in the amount of 2½ to about 3 million acre-feet at the Oroville site on the Feather River for flood control, irrigation, electric power and other purposes; (*b*) making estimates of irrigation yield, electric power output, flood control, and other benefits which would result from the operation of the project; (*c*) preparing cost and financial analyses of the project; and (*d*) submitting reports thereon.

Mr. BANKS. The State of California proceeded with its studies of means of providing its ultimate water requirements and in 1951 issued a report on the Feather River project. Governor Knight has already

told you about our plans to proceed with the construction of this great undertaking immediately. We plan to start actual construction work on the Feather River project, in particular Oroville Dam, Reservoir, and powerplant, early in 1957. By 1962, we expect to have sufficient storage capacity available to accomplish the flood-control objectives.

Thus, as we appear before you today in support of H. R. 8677 we can say that the State of California is ready and willing to move forward and to carry the major load in conserving and controlling the waters of Feather River; there is unanimous agreement between Federal and State agencies on the method by which the water of Feather River should be developed and controlled; and the Chief of Engineers has recommended to you in his report of 1948 that additional flood protection through multiple-purpose storage on Feather River should be authorized pursuant to the policy declared in the Federal Flood-Control Acts of 1936 and 1944.

The proposals of H. R. 8677 would provide an effective means for the State of California and the United States to enter into partnership in the regulation and control of our most vital resource in accordance with the policy recommended by the Presidential Advisory Committee on Water Resources Policy. An allocation of Federal funds in the interests of flood control would expedite completion of the works and would attain the Federal objective as expressed by the Chief of Engineers with the least outlay of capital funds by the United States.

Before concluding my presentation, I would like to comment briefly on the flood damages which can occur along Feather River. In our 1951 report entitled "Feasibility of Feather River Project and Sacramento-San Joaquin Delta Diversion Projects Proposed as Features of the California Water Plan," which is submitted for your information and files, we estimated that a recurrence of historical floods with then existing and reasonable future developments on the lands adjacent to Feather River would aggregate about $80 million over a 50-year project amortization period.

And in this connection, if the committee please, I would like to submit for the record of the committee the data on flood-control benefits starting on page 26 and ending on page 34 of that report which contains certain historical data, which I think you will find of interest, and the detail of our studies.

Mr. DAVIS. We will consider that as an appendix to the record.

Mr. BANKS. Thank you.

On the basis of our experience last December it appears that our estimates of the destructive forces of the floodwaters were entirely too conservative, for we had more than $50 million in property damages from that one flood alone. The area subject to flooding is growing apace with the rest of the State and if, for the purposes of estimation, we assume a future annual increase in value which is less than half the actual experience since the end of World War II, we come to the obvious conclusion that future flood damages would be staggering unless we in the State and Federal Governments move rapidly toward correcting the existing situation.

If last December's flood were to repeat itself midway in a future 50-year project amortization period, the damage would be in the order of $85 million. Thus, if the historic floods of the 50-year period of record were to repeat themselves, we could anticipate damages totaling $165 million, or averaging $3,300,000 annually.

This value in itself, if capitalized at 3 percent would support a present allocation to flood control in excess of $100 million. Furthermore, our present estimates do not include benefits which would accrue to other parts of the Sacramento River flood-control project as a result of the reduction in flow of the Feather River; nor do they include any estimate of potential damage to the city of Marysville which avoided being flooded last December only by the narrowest of margins; and finally they do not include any factor for floods greater than any experienced which could also be effectively regulated in Oroville Reservoir. Flood-control storage of 500,000 acre-feet in Oroville Reservoir, as proposed, will effectively control floods with a frequency in the order of once in 200 years to releases which can be safely handled by existing downstream channels.

In this connection I would like to refer the committee to plate 10 in our report, California Floods of December 1955, which illustrates graphically the results of our studies of the effectiveness of Oroville Reservoir in controlling floods. Provision of flood-control storage space in a multipurpose reservoir at the Oroville site is certainly the cheapest method of flood control for the Feather River.

Gentlemen, in conclusion I wish to again emphasize the urgency of our problem on Feather River—it has long been recognized and we intend to correct it. We ask you to join with us in line with long-established Federal policy in order that we may proceed more rapidly.

We would also like to submit for your information and files our report, Program for Financing and Constructing the Feather River Project as the Initial Unit of the California Water Plan, dated February 1955.

This is not part of my prepared statement, but several members of your committee have asked for some information and particularly the power features of the Feather River project. At Oroville we propose a hydroelectric powerplant with 440,000 kilowatts of installed capacity. The reservoir itself will be 3½ million acre-feet in capacity with, as I said, 500,000 acre-feet reserved for flood-control storage during the critical flood season. The dam itself will be about 730 feet high, one of the largest dams in the world. The total cost of Oroville Dam, reservoir, powerplant and necessary after bays will be about $418 million according to our present estimates.

I should be very happy to answer any other questions the committee has.

Mr. DAVIS. Do you see a foreseeable demand for the power that will be produced?

Mr. BANKS. It is our understanding that the Pacific Gas & Electric Co. will contract for that power as soon as it becomes available and will take it. We anticipate that we can begin some generation of power in 1963 under our present schedule of construction as now proposed.

Mr. DAVIS. Any questions?

Mr. ROGERS. Mr. Chairman, I just have one question. On your statement on page 65, "flood-control storage of 500,000 acre-feet at Oroville Reservoir as proposed will effectively control floods with a frequency in the order of once in 200 years"——

Mr. BANKS. Yes.

Mr. ROGERS. "To releases which can be safely handled." You mean you have only had a history of once in 200 years or once a year?

Mr. BANKS. We have about, I believe, 50 years of record but extrapolating the floods that have occurred within that period of record by engineering techniques we can estimate a flood which would occur on the average of about once in 200 years, the magnitude of such a flood, and we know it can be taken care of by this proposal.

As a matter of fact, to control last December's flood, which was one of the largest of record, would have only required about 350,000 acre-feet of storage capacity.

Mr. ROGERS. You would still be able to take care of the highest?

Mr. BANKS. Yes.

Mr. BALDWIN. I would like to say on this point that we had a very vivid illustration in California in December of just exactly what happened on streams that had dams and streams that did not because certain of those streams pouring out of the Sierra Nevadas have dams such as the American River with Folsom Dam and certain rivers do not. It was a vivid example because the city of Sacramento directly below Folsom has been subject to flooding in past years before construction of Folsom Dam and if Folsom Dam had not been built would probably have been subjected to the worst damage it ever experienced, but because of the existence of that dam the city of Sacramento was saved whereas a comparable situation on the Feather River without a dam resulted in the greatest disaster we have ever had. That is a most vivid example of what it means to have a dam at the right spot at the right time.

Mr. BANKS. The damages that were probably saved by Folsom, we believe anyway, were about equal or possibly greater than the total cost of Folsom Dam and Reservoir because, as you say, it would have caused widespread damage in the city of Sacramento and in the surrounding metropolitan area.

Mr. DAVIS. At the time of that flood Folsom was not quite completed, was it?

Mr. BANKS. Fortunately, Mr. Davis, it was complete enough so that the corps could operate it and achieve effective flood control.

When the north levee along the American River is complete we believe the American River will be effectively controlled against all except the most unusual acts of God in the way of floods, but there does remain some work to be done on the American River, notably some levee work on the north bank.

Mr. DAVIS. Any further questions?

Thank you very much.

Mr. ENGLE. Senator Kuchel requests permission to file a statement.

Mr. DAVIS. Without objection it will be put in this part of the record.

(Senator Kuchel's statement follows.)

STATEMENT OF SENATOR THOMAS H. KUCHEL, CALIFORNIA

I appreciate the opportunity to record my support of H. R. 8677, which has been introduced by the Honorable Clair Engle of California for authorizing a monetary contribution by the United States to the Oroville Dam and Reservoir, a multiple-purpose project proposed to be constructed on the Feather River by the State of California.

The Feather River has been studied in previous years by the Department of the Army. The Chief of Engineers reported to the Congress on July 27, 1948,

that large-scale storage should be developed on the Feather and its tributaries "in order to provide a balanced degree of flood control on the (Sacramento) valley floor" (H. Doc. 367, 81st Cong., 1st sess., p. 39).

Additional consideration of the matter by the Congress was deferred because the State engineer of the State of California, in commenting on the report of the Chief of Engineers, recommended further study of the Feather River projects (Bidwell Bar and Big Bend) "before they are considered for approval, or request is made for their authorization." Subsequently the legislature of California has authorized the multiple-purpose Feather River project as a State project, including a 3,500,000 acre-foot storage reservoir (Oroville Dam), and has appropriated moneys for engineering and other preliminary work

H. R. 8677 would authorize a contribution of $100 million toward the cost of constructing Oroville Dam and Reservoir, in recognition by the United States of the flood-control accomplishment of the project. While I understand the precise amount of the contribution of the United States may need to be determined by negotiation between the Secretary of the Army and the State of California, I vigorously support the underlying principle of H. R. 8677. Indeed, I consider that the maximum amount which can be justified on account of flood control should be authorized in the bill. It would be unfortunate to limit the authorization to any amount if the flood-control accomplishment is found, as a matter of fact, to be greater.

The division of water resources of the State of California has ascertained that the Feather River project would give flood protection to an area with a market value of $340 million. During December of 1955, floods occurred which took 47 lives and caused property damage estimated to be $70 million to the community of Yuba City and the farms of Sutter County. The major contributor to this flood was the Feather River. At the peak of the December storm, the Feather discharged 218,000 as it approached Yuba City. Combined with a flow of 161,500 second-feet in the Yuba River, which joins the Feather River near Marysville and Yuba City, this caused one of the major flood disasters in the history of California.

This is the kind of disaster the people of California are determined—with the rightful cooperation and financial assistance of the United States—to prevent in the future. The Federal Government has declared the prevention of flood damage to be a national interest (Public Law 738, 74th Cong.). Of course, it is. Construction of flood protection works on the Feather River with Federal assistance would be in consonance with this policy.

There are precedents for this. The United States is contributing the sum of $12 million toward the cost of constructing the New Don Pedro Dam and Cherry Valley Reservoir on the Tuolumne River by the city of San Francisco and local irrigation districts. In the State of Oklahoma, a $6,500,000 monetary contribution is being made to the project of the Grand River Dam Authority of Oklahoma at Markham Ferry.

The Feather River is the most important tributary to the Sacramento River. It drains an area in the Sierra Nevada Mountains east and northeast of Oroville of 3,600 square miles. The annual runoff at Oroville varies from a mean of about 4,500,000 acre-feet to a minimum of 1,200,000 acre-feet and a maximum of twice the mean and a flood flow of record of 230,000 cubic feet per second. The mean runoff represents about one-fifth of that of the entire Sacramento River drainage basin above the valley river. It is obvious that large reservoir capacity is required to regulate the Feather River against flood damage and for the conservation of its waters for beneficial use.

I sincerely urge your committee to approve H. R. 8677. It will be my purpose, upon referral by the House of Representatives of this legislation to the Senate, to press for its passage there. I propose to work to this end in my capacity as a member of the Senate Public Works Committee, as well as a United States Senator from California.

Mr. ENGLE. The next witness will be Mr. Leonard, president of Feather River Project Association.

STATEMENT OF RAYMOND A. LEONARD, PRESIDENT, STATEWIDE FEATHER RIVER PROJECT ASSOCIATION

Mr. DAVIS. I should like for the record to show we had a letter from our old friend, Maj. Gen. Arthur Wilson, now retired. We did not

know he lived at Oroville, but he seems to be a native son and a very popular man. In the Army he was chief liaison officer for many years. I suppose he knows as many Congressmen as we know ourselves. Give him our regards when you go back.

Mr. LEONARD. I certainly will.

I wish to express my appreciation for the opportunity to appear before this committee. My name is Raymond A. Leonard, an attorney from Oroville, Calif. I am appearing before you, today, as president of the Statewide Feather River Project Association, a nonprofit association of a grassroots nature, made up of men and women and organizations throughout the State, who are vitally and personally concerned with water development, including flood control. The association was formed for the primary purpose of assisting in development of the California water plan, and in particular the initial unit of that plan known as the Feather River project.

The Feather River project, which includes construction of the Oroville Dam, was authorized by the California Legislature in 1951, and will directly benefit 22 of the 58 counties of California and 76 percent of its present population. While the project is designed to store and deliver surplus waters to areas of deficiency, its other primary purpose is to furnish badly needed flood control in large areas of northern California so devastated by the terrible floods of last December, as well as by previous floods throughout the years.

The determination of the State of California to furnish flood control was well expressed by the budget session of the 1956 legislature, in appropriating approximately $91½ million to commence this project, of which one-third is desinated for expenditure in connection with the Oroville dam site and reservoir.

Surely, a State that recognizes its responsibility for water development and flood control and has shown by such concrete action an expressed willingness to proceed with such development, without delay, deserves the cooperation and encouragement of the Federal Government on projects of this magnitude. To the best of my knowledge, this is the largest and most expensive single water-development program ever undertaken, its estimated cost being $1½ billion.

In view of the fact that the Federal Government has no plans or expressed intention to build the Feather River project and in view of the fact that there is necessity for prompt action both for flood control and water distribution to areas of deficiency, we are hopeful that the Federal Government will exercise its traditional method of assisting the State in Federal contributions as a flood-control benefit.

The United States Army Corps of Engineers has already indicated to this Congress the need for flood-control storage on the Feather River.

The victims of previous floods can even more vividly demonstrate to you the necessity of these works. The important thing, however, is the fact that the people of California from the north to the south through their representatives in the State legislature have joined together with a firm resolve to undertake this great project.

We are not appearing here, before you, today, asking that a benevolent Federal Government foot the bill for the entire cost of this project—we are stating that basically the responsibility for the Feather River project, as a multiple-purpose unit, is the responsibility of the

State of California, but that, historically, the Federal Government has accepted as its responsibility the flood control, navigation, and salinity features of such projects. Certainly, such cooperation on the part of the Federal Government would be appropriate here for installations that will provide flood protection to hundreds of thousands of persons and their properties, and will also directly benefit eight to ten million people and the economy both industrially and agriculturally, not only of the State of California but of the Nation.

Mr. LEONARD. I wish to thank you very much, Mr. Chairman.

I also have here a resolution from the city of Yuba City which I would like to file and ask that it be made part of the record.

Mr. DAVIS. Without objection, it is so ordered.

(Information referred to follows:)

MARYSVILLE, CALIF., *May 11, 1956.*

RAYMOND A. LEONARD,
President, Feather River Project Association,
Mayflower Hotel.

Reference your letter May 3, 1956. The city council directed that a copy of resolution No. 1988 adopted March 5 be sent for your information.

Resolution 1988.

Whereas, the city of Yuba City is subject to Feather and Yuba River floods which place the citizens and their property in grave danger; and

Whereas, engineering studies have determined that it is not feasible to improve present river channels and levees so that the Feather and Yuba River waters will be confined to their respective channels; and

Whereas, the Oroville Dam unit of Feather River project is a sensible engineering project according to State and qualified independent engineers; and

Whereas, the Oroville Dam would protect Yuba City and its environs from future floods: Now, therefore, be it

Resolved, That the city council requests the legislature to take necessary legislative actions so that Oroville Dam construction will start this year.

The foregoing resolution was introduced by Councilman Shannon, seconded by Councilman Martin, and passed and adopted this 5th day of March 1956, by the following vote:

Ayes: Council Martin, Sanderson, and Shannon and Mayor Gauche.

Noes: None.

Absent: Councilman Hansen.

Signed Glen A. Gauche, Mayor.

Attest: Robert N. Stevenson, City clerk.

Sincerely,

F. K. DAWSON,
City Administrator, City of Yuba City, Calif.

Mr. DAVIS. Are there any questions from any member of the committee?

Thank you very much.

Mr. ENGLE. Next witness is Mr. Howard Harter, representative of the city of Yuba City, which you heard so much about as being the area damaged and flooded the worst. He represents that city and is chairman of the Tri-County Committee for the Oroville Dam, which is a committe comprised of citizens of the three counties that suffered most disastrously. Mr. Harter, I believe, has a very brief statement and some material to pass around to the committee.

STATEMENT OF HOWARD HARTER, REPRESENTATIVE OF THE CITY OF YUBA CITY, AND CHAIRMAN OF THE TRI-COUNTY COMMITTEE FOR THE OROVILLE DAM

Mr. HARTER. I want to thank you for the time you are giving us to appear here this morning. I have tried to document what I have for

presentation for you to go over in your leisure time, if Congressmen have leisure time, which I doubt. My statement will be brief because I know there is some very interesting testimony to be presented here this morning.

For the record I would like to present this which contains all of the documents we have and I have some for distribution here. Some of the others do not contain the history of floods in California, which is a little story prepared by me.

I do have a map I would like to present for the record. This is a map of Yuba City showing destruction in the city and the flood line that you can look over at your leisure. It gives the number of homes destroyed, number partially destroyed, and various things of that kind.

I would like to read a little statement I prepared this morning.

Gentlemen, I am the grandson of a pioneer who settled just west of Yuba City in Sutter County in the early sixties. He established a home in the Sutter Buttes to escape the winter and spring floods, so floods are not new in that part of California. To protect themselves from the floods the farmers built levees to keep the waters of the rivers from meandering across the valley in their favorite bypasses after being freed from the canyons of the hills where they originated. Levees for protection were increased in height as the valley developed and became more populated and there were greater values to protect. And yet these levees were broken at various times and places at flood time. In 1913 the Federal Government assumed responsibility of the control of the floodwaters of the rivers and the levees were again built higher with an ultimate plan to control all the water coming from the mountains and closed off all the bypasses which were nature's control of excessive water. These levees were and are good levees, well built, and in our county are the height of 30 feet above the agricultural and residential area surrounding them. Then came the Christmas 1955 runoff, more water than the system was designed to hold. The levee system failed at two places in Sutter County and instead of a meandering flood the waters rushed madly through the levees that contained them and swept homes before them, uprooted valuable orchards, and finally pocketed in the county surrounded by levees, drowning thousands of head of livestock, destroying an estimated 3,500 acres of peach orchards alone, and the destruction of homes, farm buildings, and equipment. As I have mentioned the thing we knew best to do, build levees, was done but now man has achieved the knowledge of building dams which have shown their worth in 1955 by the Folsom Dam and Shasta Dam without which the beautiful capital city of Sacramento, with its thousands of residences and millions upon millions of property values would have been flooded and no doubt lives would have been lost. We do want to build our levees higher but we believe our Federal Government should complete its obligation of flood control by doing its share in the building of the Feather River Dam at Oroville.

We are here in the interest of thousands upon thousands of residents of our valley who think the same as we do. We ask your support of the bill that is being introduced by Clair Engle for Federal appropriation for the Oroville Dam for flood control.

That is all I have. I thank you for the privilege of being here.

Mr. DAVIS. Thank you for coming.

Mr. ENGLE. Next is Gavin Mandery, councilman for Marysville and representing the city of Marysville, that being the city completely surrounded by water and protected by levees which, if those levees had broken, would have inundated the city to the depth of 20 feet. All these witnesses have short prepared statements and not in excess of 5 minutes.

STATEMENT OF GAVIN MANDERY, COUNCILMAN FOR MARYSVILLE

Mr. MANDERY. Mr. Chairman and gentlemen, Mr. Engle was going to make sure my speech was not too long. I assure you it will not be. My few remarks can be best emphasized by this picture that is to be presented to you gentlemen.

This picture was taken December 23 at around 12 o'clock noon at the city of Marysville. It shows the city at the time we evacuated 9,000 people from the city. I would like to point out that the city had one evacuation route left open over the large bridge at the bottom of the picture. At a later date, when the city of Yuba City was flooded, Marysville would have had no escape route from the town itself. It could have been a large catastrophe, as Mr. Engle pointed out previously.

I would like at this time to pay special tribute to the engineers stationed at Beale Air Force Base because without their help the city of Marysville would not new exist. For the record I would like to say that.

Gentlemen, I brought a chart that has been prepared by Colonel Livingston of the engineers stationed at Beale that I would like to leave for the record. This chart will emphasize two things of major importance to flood control. First that the watershed above Marysville drops about 7,000 feet in 80 miles. We have very little time to prepare for floods. It is a tremendous drop and a tremendous amount of water comes down fast. In some districts they can predict flood crests 2 weeks away.

The chart also will emphasize that they have a record over the past hundred years and the magnitude of floods has consistently increased for the past hundred years. So, although this is the biggest flood we had, if the chart continues to go over the period of the next 50 or a hundred years, we can expect bigger floods than we have had in the past.

If you look at the picture of Marysville there in the right-hand corner, we had at the time the crest of the water was high about 500 feet of our levee entirely slipped. We were within 3 minutes of blowing the siren and telling the men to run when it came under control. If the water had flooded into Marysville, it would have become part of the river channel and they could not have saved Yuba City. There would have been no city of Marysville. The few reinforced concrete buildings is all that would have been left.

Mr. DAVIS. I am grateful you gentlemen came this long distance and testified personally and the fact that you are not taking a long time does not mean you are not making an impression on this committee. Quite the contrary.

Mr. ENGLE. Next witness is Mr. Charles Randolph, member of Butte County Water Resources Commission who represents Butte County, the county in which the Oroville Dam is located.

STATEMENT OF CHARLES RANDOLPH, REPRESENTATIVE FOR BUTTE COUNTY AND DELEGATE, TRI-COUNTY COMMITTEE FOR OROVILLE DAM OF BUTTE, YUBA, AND SUTTER COUNTIES

Mr. RANDOLPH. Chairman Davis and members of the committee, I want to express my thanks and the thanks of the people of Butte County, Calif., whom I represent, for the opportunity of appearing before you today. I am a business partner and assistant publisher of the Oroville Mercury, a daily newspaper. I am also the owner of a dairy farm, which I operated for 15 years in Butte County. I am a member of the Butte County Water Resources Commission. Oroville, where I live, is on the banks of the Feather River just as the river comes out of the mountains onto the valley plain.

The flood-control proposal before you constitutes an unusual opportunity for Federal-State cooperation to meet a need that reflects responsibility of both levels of government. This proposal is in accord with accepted Federal procedures both in policy and approximately in the amount of money requested.

In addition to constituting a Federal service fully justified within the traditional policies of Congress, a Federal flood-control contribution to Oroville Dam would represent an immeasurable degree of assistance to the State of California, a State now seeking a procedure by which it can assume a greater share of responsibilities regarding water resource development.

Federal assistance to Oroville Dam would constitute help to the entire State and directly to 22 counties. Federal assistance would have the added value of getting the State actively engaged in construction of the dam. The impetus of such a contribution would assure early realization.

Authorization under prevailing Federal flood-control policy of financial assistance to Oroville Dam, as provided by the proposal before you, would serve two fundamental purposes of critical importance to our county. First, it would give the farming and urban areas of the Feather River flood plain tragically needed flood protection; second, constituting as it would substantial financial support to the State of California in building the Feather River project it would serve to bring extensive benefits to the present residents of Butte County, and to those who are moving into the county yearly in substantial numbers.

In relation to the first point, records of the United States Agricultural and Conservation Committee show that in one area on the left bank of the Feather River, 27 farms with a total of 1,860 acres were damaged last winter. Much of this irrigated fruit, vegetable, and dairy farmland was reduced to gravel bars or covered with sterile river sand. Much of the land is lost. Cost of reclaiming the balance is estimated by this committee at $250,000. The Federal Government participates in this recovery program. Loss in long-range productivity is not included. Should the maximum recorded flow of the Feather River be repeated today, the area mentioned would suffer far more extensively.

The cities of Biggs and Gridley are in danger of flooding whenever the river flow exceeds the design capacity of the flood control project. This has occurred on the average of about once every 10 years. Losses to roads in Butte County, including Federal aid roads, were $504,000

during December flood. A substantial amount was due to Feather River overflow. The agricultural losses for the county were computed by the agricultural commissioner at $1,178,100, much of the loss due to Feather River flooding.

With reference to the second point, benefits Butte County would derive from the Feather River project are also substantial. While the Feather River carries an annual average flow of 4½ million acre-feet of water, people living along the stream and near it are in need of water for domestic and agricultural purposes. Without additional storage we will continue to face the threat of inadequate water supplies during the summer months. For more than 10 years, the existing level of agricultural production on irrigated lands has been maintained only through insecure assistance from a private utility hydroelectric powerplant reservoir. Production of fruits, vegetables and dairy products would experience substantial growth with the assurance of the additional water the Feather River project would give us.

The requirements for domestic water are even more severe. The foothill slopes of the Sierra Nevadas are proving popular as part-time farm and residential areas for thousands of those who come yearly to California. These areas are likewise popular with citizens experiencing the benefits of our welfare and retirement programs. As these programs reach greater maturity, the numbers of people seeking the advantages our area offers is increasing rapidly. The Orville-Wyandotte Irrigation District has increased its domestic services from 1,100 to 1,600 in only 5 years. This district, which serves both agricultural and domestic patrons outside the city of Oroville, has had to curtail its usage as recently as this spring. The district holds a Federal power license to develop a hydroelectric project. However, the project is of such marginal feasibility that the license, once renewed, will apparently lapse this summer.

Due to the favorable credit enjoyed by the State of California, this project, should it become a part of the Feather River project as recommended by the California State Division of Water Resources, would actually return a profit to the Feather River project. But this cannot be realized without an actual start on the Feather River project.

While making its traditional contributions to flood control a Federal allocation of funds commensurate with the flood-control benefits of Oroville Dam would clinch a construction start on theDam and the Feather River project and give the State of California the support needed to embark on the gigantic task of supplying water to its rapidly growing population, a job to which the Congress has made noteworthy contributions of leadership and finances in the past, and in which the State now wishes to assume as much of the job as it is able to do and as rapidly as it is able to do so.

Mr. Chairman, that concludes my remarks which I have abbreviated somewhat. They are in more extended form and I would like to present them for the record in that form.

Mr. DAVIS. Without objection it is so ordered.

Mr. ENGLE. Next is Mr. Stanley Pittman, city councilman and representative of the city of Oroville.

STATEMENT OF STANLEY PITTMAN, CITY COUNCILMAN, REPRESENTING CITY OF OROVILLE

Mr. PITTMAN. Mr. Chairman and members of the committee, I appreciate the opportunity of appearing before this honorable body. My name is Stan Pittman. I am a member of the city council of the city or Oroville, Butte County, Calif., and have been authorized by that body to represent them here, today, as a part of the delegation of the tricounty committee for Oroville Dam of Butte, Yuba, and Sutter Counties. I am also a member of the advisory committee of the Statewide Feather River Project Association and a member of the League of California Cities' Water Resources Advisory Committee.

As president of the Oroville Chamber of Commerce, I had the opportunity and great pleasure of meeting members of this committee headed by Hon. Clifford Davis and members of the House Interior Committee headed by our Congressman, Hon. Clair Engle, January 10, when these committee toured the flooded areas of the tricounties and held a flood-control hearing in the city of Oroville. Our people have asked me to extend their very best wishes to all of you.

I have been a resident of Oroville all of my life, and my people before me. As a consequence, I am familiar with, or have been made familiar with, the district's vulnerability to floods—the greatest of which were in the years of 1907, 1928, 1937, and, this past year, when a portion of our city was flooded out, including our sewer system, which discharged raw sewage into the river, which was backing up into the city. Even with our partial levee system, built in 1907, we live in constant fear of winter floods. Should the river reach its maximum flow, we could very well be, another Yuba City. As it is, our industrial growth has been greatly impeded, due to the fact that our finest industrial tracts, embracing several hundred acres, are in the areas flooded out last December. Along with this threat, we are a city situated on the banks of California's last, largest remaining source of undeveloped water, the Feather River, and have no secure supply of water. I might even say, we, along with the arid areas of California who are crying for water, must work out a definite plan for our almost immediate needs.

We of the Oroville district recognize that any plan for flood control must embrace also the conservation of water without which the financing of any major flood control project would be impossible. We recognize, too, that a project of the magnitude of the proposed Oroville Dam can be justified only when its benefits are far-reaching to large areas and populations in other parts of the State of California.

We too are particularly concerned with flood control for the reason that ours is the first area to be hit by the explosive force of the turbulent Feather River.

Necessity for Oroville Dam, without a doubt, was well demonstrated by the tragic floods of last December which historically were the greatest ever experienced in northern California, or in the State for that matter.

According to experts, Oroville Dam could be completed as early as 1962, with many other benefits, even larger than the initial ones, to be

realized. Completion of this huge project would also mean vast benefits to agricultural interests in the northern part of the State of California, both in flood control and in additional water for irrigation.

Flood control benefits of the entire Feather River project were computed in 1951 by the California Division of Water Resources at $50 million. These benefits would be realized in Butte, Yuba, and Sutter Counties.

It appears that authorization of an allocation of Federal funds to Oroville Dam in the interests of flood control is in accordance with the policy declared in the Federal Flood Control Act of 1936, which has been brought out in the State engineer's report of floods of 1955.

Mr. PITTMAN. Thank you for allowing me to appear. Are there any questions?

Mr. DAVIS. Thank you very much. Are there any questions?

You men are doing such a good job you have left us no questions.

Mr. ENGLE. Next is Mr. Eber Beilby, chairman of the Board of Supervisors of Sutter County, the area in which those two cities affected by the flood are located.

STATEMENT OF EBER BEILBY, CHAIRMAN, BOARD OF SUPERVISORS OF SUTTER COUNTY

Mr. BEILBY. Mr. Chairman and gentlemen of the committee, my name is Eber F. Beilby. I am chairman of the Sutter County Board of Supervisors. By unanimous request of the Sutter County Board of Supervisors, I have been instructed to appear here and urge, on behalf of the board and Tri-County Committee for Oroville Dam, favorable support of the Oroville Dam project.

Yuba City, which is in Sutter County, and approximately 100,000 acres of agricultural land in Sutter County, were inundated by the flood of late December 1955.

This flood resulted in the loss of 40 lives and the destruction of property valued at $53 million in Sutter County. This represents a loss of 25 percent of the total assessed valuation of the county, affecting 20,000 people.

In a county such as Sutter it is going to be exceedingly difficult for us to carry on the routine functions of the county for a few years until the flooded area can again reestablish itself.

Naturally, our people are discouraged and apprehensive because the capacity of the Feather River at Yuba City is considerably less than the Christmas flood of 1955, and there is great fear that another flood may occur before remedial measures can be provided to safeguard the area.

A feeling of gloom and sorrow prevails because of the loss of the men, women, and children who were so suddenly drowned Christmas Eve, and the joyous spirit of the holiday season was so abruptly turned to a time of sorrow and grief because of the loss of loved ones, particularly the children who were expecting Santa Claus the next day.

As a county supervisor, I move among the people of the county and from personal contact I am in a position to bring to you the exact conditions and feeling of the people of my county.

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Your support of the Oroville Dam project will be gratefully appreciated by a people that have earnestly devoted themselves to the best traditions of American life.

Like most farmers, the landowners in Sutter County are not wealthy. They must go into debt to get started again. Many of these are older people, and it will be difficult for them to pick up and get started again. Some will never reestablish themselves. Orchards that had just started to bear were completely destroyed. This represents at least 4 to 5 years of waiting, during which time borrowed capital, drawing interest, has been put into the rehabilitation operations.

Throughout the flooded area untold devastation and destruction of homes with family heirlooms, keepsakes, and personal effects which can never again be restored brought regret and disappointment to many families. The accumulations of a lifetime of saving, collecting, and preserving of family treasures were destroyed in a very short time.

The combined efforts of many families over long years of arduous labor to acquire and develop property with the hope of having security in their later years were destroyed almost without notice.

In a great many cases, due to the destruction of the cable which controls the communications throughout the county, in the afternoon of December 23, 1955, the first notice that people had of the flood was when the water began to enter their homes, and it came so rapidly that they had to climb on the roofs of their homes or find refuge in trees. Many mothers took children in their arms and spent the night on the roof or in trees holding babies and small children, soaked by rain until rescued the next day. Many heroic examples of mothers and fathers risking their lives to save their children were common throughout the flooded area.

The citizens and property owners, who had known comfortable homes, property, schools, and normal community living, suddenly found themselves living in emergency shelters and being fed by the neighbors and the Red Cross.

A most discouraging and disheartening condition for a proud and spirited peole, devoted to their families and their country, to find themselves suddenly destitute and without the means of supporting their families or recouping their losses.

Though the water had begun to recede, 2 weeks later there was another flood crest in the Feather River which gave every indication that the newly repaired levee would not hold and another inundation would occur. However, by heroic and herculean efforts of the United States Army Corps of Engineers the levee was made to hold. In the meantime, many families were fearful of returning to wet, unheated homes, for fear of a second rush of water that would destroy the little remaining semblance of home.

Many homes were completely destroyed. The housing of families presented a serious community problem. These families are now living in temporary shelters of some sort.

Throughout the first 2 or 3 weeks of January, the people of Sutter County were in condition of shock, hardly able to realize the great misfortune that had come to them.

Now, as the work of cleaning the trash, repairing damaged homes, moving debris from farmlands, building new schools, uprooting dead fruit trees, and burying of dead animals proceeds, there is an under-

Army engineers have told us that had the Marysville levee system

current of reluctance, hesitation, and bewilderment for fear the Feather River may again go on the rampage and repeat the disaster of Christmas, 1955.

The Feather River levee system is designed for a flood discharge of 277,000 cubic feet per second after the Yuba and Feather Rivers merge, however, still exposed on the north to levee capacity of 180,000 cubic feet per second. The flood of Christmas, 1955, equaled 380,000 cubic feet per second, or 103,000 cubic feet per second in excess of the designed capacity of the river levee system.

Should the Christmas flood of 1955 be repeated before the Oroville Dam on the Feather River is completed, another flood may occur in Sutter County. As a county supervisor, I am thoroughly familiar with the prevailing conditions relative to the possibility of flood and the fear the citizens have for a repetition of another disastrous flood. I cannot urge you too strongly to give favorable consideration to the legislation for flood control for the Oroville Dam now before this committee.

Mr. DAVIS. Thank you.

Mr. ENGLE. We have Mr. Harold Sperbeck, chairman of the Yuba County Board of Supervisors, the office similar to that held by Mr. Beilby but in the adjoining county.

STATEMENT OF HAROLD SPERBECK, CHAIRMAN, YUBA COUNTY BOARD OF SUPERVISORS

Mr. SPERBECK. I am Harold J. Sperbeck, chairman of the Board of Supervisors of Yuba County. My colleagues and I are very happy to have this opportunity to appear before you and explain, briefly, why we are for the early authorization and completion of the Feather River project.

The city of Marysville, Calif., is located at the confluence of the Feather and Yuba Rivers. These two rivers are the largest in northern California that to date have had no flood-control projects. We are informed by qualified engineers, both Army and civilian, that Marysville will be in constant danger of flooding until dams are built on both the Feather and Yuba Rivers.

We have graphs and charts with us that depict the flood history of our community for the past 100 years. The great Feather River has been confined more and more during this graphic history due to reclamation projects, etc., so that as a result last December it sent the greatest head of water in recorded history down its channel. This condition was also abetted by the fact that much of the watershed from which this river flows has been timbered off in recent years.

The graphs to which I referred a moment ago show conclusively that we have an extremely high water incidence about once every 12 to 15 years and they also indicate that the flood plains have grown gradually higher each time.

Engineers have told us that if the levee had not broken in Sutter County during the Christmas floods of last year that our whole levee system would have been topped with from 3 to 6 inches of water. In other words, its took a tragedy to save our town and possibly a good portion of our rural area.

for the wonderful job the Corps of Engineers did under most adverse

Army engineers have told us that had the Marysville levee system failed at any spot during the flood crest of last year that our city would have been filled with water from 18 to 22 feet deep within minutes. It was also stated by the same authorities that water would have been 2 feet deep within 10 minutes thus stopping all traffic and any possible evacuation.

Our levees were subjected to such extreme pressures during these recent floods that it is extremely doubtful if they could withstand even a much lower flood plain in the future. Many of the wing and bow levees that help to control and divert river currents were washed away completely and have not been rebuilt to date.

Marysville is an old and historic city. It has been a trading center of the northern Sacramento Valley since the gold rush days of 1849. It presently serves a trading area of about 60,000 people. It is served by both the Southern Pacific and Western Pacific Railroads and is astride Highway 99E and Alternate Highways 40 and 20. It is truly a vital communications center.

It is our firm conviction that if the Feather River Dam is not built then sooner or later Marysville, or a large portion of our rural area, will become a flood victim. We feel that the construction of the dam is the only thing that can be done to provide us with permanent protection from the Feather River.

Should Marysville be inundated due to flooding waters this city of about 10,000 people and property values of $75 million would cease to exist. The force of the water would destroy all buildings except those few built of reinforced concrete, and silt and debris deposits would wreck for alltime the very ground that the city is built upon.

We believe, gentlemen, that the very existence of Marysville depends upon the early completion of the Feather River Dam and we cannot urge too strongly that the Federal Government join with the State of California in its immediate construction.

Thank you very kindly for hearing me.

Mr. DAVIS. Thank you very much.

I think Mr. Grover Shannon will be the last witness.

Mr. ENGLE. Yes, that is right, and we have two others that relate to the little project at Chico Landing and Red Bluff who will be very brief.

Mr. DAVIS. I thought due to the circumstances that your very good statement on H. R. 9595 could well be supported by these two gentlemen simply filing their statements at the conclusion of that part of your statement in connection with 9595.

Mr. ENGLE. They will be glad to do that. Mr. Lindauer is here and Mr. Bower and I will get their statements and submit them. In the meantime, Mr. Shannon can proceed.

STATEMENT OF GROVER SHANNON, YUBA CITY, MEMBER OF STATE RECLAMATION BOARD

Mr. SHANNON. Mr. Chairman and members of the committee, I am very sorry I was not in Yuba City at the time you visited but I was in Sacramento as a member of the State reclamation board obtaining rights of entry and borrow material for the Corps of Engineers to repair the levee. At this time, Mr. Chairman, I want to express the very grateful thinking and appreciation of the community

for the wonderful job the Corps of Engineers did under most adverse circumstances of closing that break in 10 days' time.

I am Grover C. Shannon, vice chairman and member of the State reclamation board, but primarily I am a farmer residing in the middle of Sutter County. I would like to present to you some statistics in a very brief way to give you an idea of what really occurred. The number of persons dead, as you have heard, is 40. Number of homes destroyed with minor and major damage totaled 7,212. Number of farm buildings destroyed with major and minor damage, 2,955. Number of other buildings damaged with major or minor damage, 535. Estimated loss of these buildings totals $16,910,000. This is arrived at due to the fact that practically all these buildings have been appraised by competent appraisers prior to April 15, 1956, and income tax refunds and deductions were made on the basis to meet approval of the Internal Revenue Service audit.

Agricultural loss compiled by T. D. Urbans, agricultural commissioner of Sutter County and Romain Young, regional coordinator for the State department of agriculture as of February 15, 1956, totals $27,435,000. I think we are all in accord that that is a very conservative estimate. One item alone in that estimate made February 15, they estimated 1,900 acres of peaches dead with 338 probable loss. On May 1 a very thorough survey was made of the peach orchards and 3,700 acres were declared dead plus 350 probably dead or severely damaged.

The other damages as a result of the December flood are somewhat in this order:

Corps of Engineers in excess and still appraising, $6,635,000; Red Cross in excess of and still operating, $4 million; Nicholus Bridge, 5th Street Bridge and roads, $3,500,000; Sacramento Northern Railroad bridge, $1,200,000; Sacramento Northern Railroad bridge, State of California, $160,000; Pacific Gas & Electric, $530,000; Marysville Levee Commission, $420,000; Levee District No. 1, $240,000; Sutter County, $80,000; Pacific Telephone & Telegraph Co., $1,500,000; 13th Agricultural Fair Association, $185,000; schools, $250,000; Levee District No. 1000, $275,000.

I would like to call attention of the committee to the fact that above and upstream from the site of the break last December are some 20 miles of vulnerable levees on both banks of the Feather River. If a break had happened in the upper section of that, the floodwaters would not only have ravaged Yuba City but the towns of Gridley, Biggs and Live Oak and would have coursed down through many miles of just as highly developed and valuable agricultural lands as was flooded by the break at the Gum Tree site and would have finally impounded itself in exactly the same flooded area that was used by that break.

These members of this committee and Congress are some of our reasons for asking for passage of Congressman Engles' H. R. bill 8677 authorizing the appropriation of $100 million as a monetary contribution toward the construction costs of Oroville Dam on the Feather River in the interest of flood control. Not only on the Feather River, but also downstream from the confluence of the Feather with the Sacramento past the State Capitol of Sacramento through the Delta to Suison Bay.

Mr. DAVIS. Thank you and thank you, Mr. Engle, for arranging the presentation so we can accomplish so much in one morning's time. I am sure the committee shares with me the belief that we have a full and complete picture of the needs.

We will hear from the engineers at some later time, not today of course.

I want to thank you again, Mr. Engle, for arranging a very fine presentation.

Mr. ENGLE. We are much indebted to you and the members of your committee. The mayor of Los Angeles, our former colleague Mr. Paulson, got on the witness stand on the Subcommittee on Irrigation and Reclamation and he has not been able to get off. He expresses his regrets to the committee but desires the consent of the committee to file his statement which has already been presented to the members.

Mr. DAVIS. Without objection, it is so ordered. We will be glad to see him later in the day.

(Statement referred to follows:)

STATEMENT BY MAYOR NORRIS POULSON OF LOS ANGELES

I am delighted to have this opportunity to appear here today in support of Congressman Engle's bill authorizing a Federal Government contribution of $100 million for flood-control accomplishments of the proposed Oroville Dam and Reservoir.

I believe I am speaking for the great majority of the people of southern California when I say that California has no more urgent need today than the protection of the citizens of Marysville and Yuba City and the adjacent areas from a repetition of last winter's devastating floods.

California is one State and, when disaster strikes the northern sections, its impact is felt severely in the city of Los Angeles and throughout all the cities and counties in the south.

We of southern California are endorsing State legislation to assist the flood-ravaged areas and I am here today to make it clear that we likewise support this bill under consideration by this committee.

By the construction of many millions of dollars worth of flood-control projects, we have been able to cut our own flood damages to a small fraction of what they would otherwise have been. We know firsthand the tremendous value of such works to a community. Our own rainfall during this winter just past was probably as intense as we have ever experienced. However, our program of flood control that has been carried out over approximately the last 15 years prevented hundreds of millions in damage and saved scores of lives.

We want equal protection for our fellow Californians in the north. While our State assemblymen and State senators may have their differences at the sessions of the legislature in Sacramento, on such a bill as this, we will—I am sure—find all of the elected representatives of our State in firm agreement.

May I say, too, that I regard Mr. Engle as one of the best authorities on water problems such as reclamation, water rights, and flood control in California. The leadership he has provided in finding and putting into effect the solutions to these questions has been of tremendous value.

I am grateful to have this chance to testify in behalf of this highly desirable bill he has introduced. I believe that its prompt passage is strongly in the interests of all of the people of our State, however distant they may reside from the site of this reservoir and dam.

Mr. ENGLE. I would like to submit for the consideration of the committee two amendments to this bill which I discussed with General Itschner and which he prepared at my request to bring the language of the bill into conformity with the usual language the Army prefers to have and in addition provides the language which I previously mentioned which would make the amount of the flood-control contribution that amount which is found to be the correct amount.

I would like to have the proposed amendments with which I am in agreement presented to the committee and made part of the record at this time.

Mr. DAVIS. It is so ordered.

(Information referred to follows:)

PROPOSED AMENDMENTS TO H. R. 8677

In line 7, page 1, strike out the word "as".

In line 8, page 1, strike out "the sum of $100,000,000"; and substitute the following:

"The amount of such contribution shall be determined by the Secretary of the Army in cooperation with the State of California, subject to a finding by the Secretary of the Army of economic justification for allocation of the amount to flood control,".

Lines 7 and 8, page 2, delete "such operation to be consistent with the other multiple purposes of said dam" and substitute: "such operation of the dam for flood control shall be in accordance with rules prescribed by the Secretary of the Army pursuant to the provisions of Section 7 of the Flood Control Act of 1944 (58 Stat 890)."

Mr. ENGLE. Before closing I wonder if I could have these two splendid farmers of my area who came here introduced to the committee. Mr. Eary Landauer has known me since I was knee high to a grasshopper, and Mr. Jack Bower, from Chico, both farmers in the area you visited. Their statements have been filed and with the consent of the committee made part of the record in connection with the small project first mentioned in my presentation.

Mr. Chairman, that is all I have. I want to express my appreciation to you and to the members of your committee not only for your kindness and attention now, but for taking the time as you did with two members of your committee to come out to California during the flood period in this past winter.

Mr. DAVIS. Thank you again.

The committee stands adjourned until 10 o'clock tomorrow morning. Testimony of the Corps of Engineers to be heard later.

(Whereupon, at 12 noon, Monday, May 14, 1956, the hearing was adjourned to reconvene at 10 a. m. Tuesday, May 15, 1956.)

FLOOD CONTROL OMNIBUS BILL

TUESDAY, MAY 15, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to notice, at 10 a. m., Hon. Clifford Davis (subcommittee chairman) presiding.

SALT CREEK PROJECT, NEBRASKA

(H. Doc. 396)

Mr. DAVIS. Come to order, please.

The committee will take up today the Salt Creek project in Nebraska, represented by House Document 396. It is our usual custom to hear from the Corps of Engineers first. In this case, because the Department of Agriculture is involved, we shall also hear from Mr. Carl Brown, Director of the Planning Commission of the Soil Conservation Service. However, out of order because Senator Hruska is here, and not only as a matter of courtesy to him but we feel he is entitled to get back on the other side of the Capitol to meet important commitments.

If there be no objection, I will ask Senator Hruska if he will come around and make such statement as he cares to make.

STATEMENT OF HON. ROMAN L. HRUSKA, A SENATOR FROM THE STATE OF NEBRASKA

Senator HRUSKA. Thank you, Mr. Chairman. I will not make a long statement. I might say that first of all I want to express appreciation for this priority which is extended me, Mr. Chairman. My interest in this matter stems from two things: One is that it is a project which covers about 1,600 square miles in the State of Nebraska. Secondly, there is a bill pending on the other side in the other body and it happens I am serving on the Public Works Committee there and have a great deal of interest in it for that reason.

I might say further, Mr. Chairman, that on the other side we appreciate a great deal so much of the preliminary work which is done by this committee. I know it is being done in this project as it is in many, many other projects where many of the details are covered, many of the tests which are applied to all of this legislation are applied very assiduously by this committee and we have come to rely upon that and are very appreciative of it.

Mr. Chairman, as all of us know, there are many tests which are applied to legislation of this character. I am not going to go into

furnishing the backgrounds or suggesting too many of them because there are many witnesses here from the field who will bring you much of the story and in very interesting form, I am sure. I would like to testify to this extent, however, that one of the tests, certainly one to which we pay a great deal of attention over there on the other side—one of the tests is the understanding and interest of the local people in any given project. I submit to you that there is not any project which we will find coming across the table which will excel this one in that respect.

You will find many fine, interested citizens who will evidence their interest in this and as the story unfolds I know it will engage your attention and that it will sell the project.

With that, Mr. Chairman, unless there are some questions I should like to ask to be excused.

Mr. DAVIS. Thank you very much, Senator. We will be seeing you on the other side a little later. Thank you.

I want to reverse the order a second time because our good friend, Dr. Miller, must be present at a full hearing of the Interior Committee. He left a formal statement which I shall ask to be made a part of the record immediately following the recognition of his presence personally. Dr. Miller is here, very much interested in the project, but knowing the procedures in the House and in the committees, and because he must be with his full committee of which he is a very important member, if there be no objection, Dr. Miller, we will make your formal statement a part of the record at this point.

STATEMENT OF HON. A. L. MILLER, A REPRESENTATIVE TO CONGRESS FROM THE STATE OF NEBRASKA

Mr. MILLER. Thank you very much, Mr. Chairman.

(The statement referred to follows:)

STATEMENT OF HON. A. L. MILLER, MEMBER OF CONGRESS, FOURTH DISTRICT, NEBRASKA

Mr. Chairman, I won't burden the committee's time with a detailed explanation of the physical features of this project or the efforts that have been so successfully made to organize the local people and to secure their cooperation. I would like to take just a few minutes to state generally the need for the project, and to restate my approval of the principle of local and Federal cooperation in works of this nature, both in flood control and irrigation projects.

The Salt Creek Basin covers an area of approximately 1,600 square miles. Most of the area is agricultural, and the land is inherently as fertile and productive as any in the State of Nebraska. Also included within the basin is the city of Lincoln, the capital city of Nebraska, which had, in 1950, a population of about 99,000 but now has a population of more than 125,000. Nearly 1,000 residences and a large number of business establishments in Lincoln have felt the effects of floods from Salt Creek and its tributaries in past years. There have been a number of disastrous floods in that area. Since 1900 there is record of at least 97 floods on Salt Creek, and 39 floods on Wahoo Creek, its principal tributary. Twenty-two of these floods were major, but the worst occurred in May 1950, when more than 20,000 acres of fertile farmland were covered, damages rose to $2,880,000, and 9 lives were lost. The following year another flood damaged property in Lincoln and the surrounding area to the extent of $1,720,000.

The Salt-Wahoo flood protection plan has been designed by the Corps of Engineers and the Department of Agriculture. The cost-sharing features have been worked out by agreement among these two agencies and local interests. Total first construction cost of the 12 dams and reservoirs, the channel improvement and levees, and other physical construction features contemplated is estimated

at $14,276,000, which will be divided between Federal and local on the basis of $12,683,000 to the Federal Government and $1,593,000 at the local level. The local organizations have raised by contributions and otherwise approximately $83,000, and have indicated their willingness to acquire the land necessary for the dams and reservoirs, rights-of-way, and to do all other things required of them by law and the report submitted by the Corps of Engineers. Annual maintenance costs will be borne in great part by the local organizations, except for the relatively minor dam and reservoir maintenance expenses which will be undertaken by the Federal Government.

This is the type of Federal-local partnership that ought to be encouraged. The city of Lincoln, farmers, businessmen, and other citizens in this area have already undertaken measures to relieve the flood danger, but because of the area and problems involved it has become necessary to ask the Federal Government to join with them. The project is greatly needed, and it is highly feasible.

I appreciate the opportunity of submitting this statement to the committee, and would strongly urge your favorable consideration of the Salt-Wahoo project.

Mr. DAVIS. Now I am going to ask Congressman Phil Weaver to proceed.

STATEMENT OF HON. PHIL WEAVER, A REPRESENTATIVE TO CONGRESS FROM THE STATE OF NEBRASKA

Mr. WEAVER. I want to extend my thanks and appreciation to you, sir, and other members of the committee, for giving me an opportunity to appear here today along with those from Nebraska on behalf of H. R. 6942, which would provide a flood-control project for Lincoln, Nebr., and surrounding areas. I do not intend to take a great deal of your time. I am going to leave that to the experts.

I would like to say just a few words in this connection. There have been different approaches to the flood-control problems in and around Lincoln which made duplication of expenditure and effort almost inevitable. However, today, through the Corps of Engineers and the Soil Conservation Service of the Department of Agriculture, we have a well-developed and a well-integrated plan which is in complete agreement and approval with local and State interests and on the national level.

I think that those who are here from Nebraska themselves, today, are intimately familiar with the flood-control problems that we have in the area, and I trust and know that your committee, sir, will carefully consider the remarks that they make, along with the technical information and data that will be presented by the Corps of Engineers and the Soil Conservation Service of the Department of Agriculture.

Aside from that, that is all I have now, sir, until we are ready to present those people from Lincoln and from surrounding communities of Nebraska who are closely associated and connected with the problem we have before us.

Mr. DAVIS. Thank you so much, Congressman, and we are glad you are here personally. Now, I think we had better hear from our old standby, Joseph Brennan.

STATEMENT OF JOSEPH R. BRENNAN, CORPS OF ENGINEERS—Resumed

Mr. BRENNAN. Mr. Chairman and members of the committee, the report with which we are concerned today involves Salt Creek, Nebr. Salt Creek is located in the east-central part of the State close to the

Missouri River. It is formed by the confluence of 2 branches near Roca, Nebr., and flows approximately 50 miles northward to its confluence with the Platte River slightly below Ashland. The Platte River, in turn, joins the Missouri River below Omaha. The report was authorized by a House Flood Control Committee Resolution of June 21, 1944. It was submitted to Congress on April 25, and will be printed as House Document 396 of the 84th Congress.

The size of the basin, Mr. Chairman, is approximately 1,600 square miles. The principal tributary is Wahoo Creek, which drains the northern one-third of the basin. The population is approximately 135,000, of which approximately 100,000 is located in Lincoln itself, which is the capital of Nebraska.

The flood problem is characterized by flood flows of short duration and high peaks. There have been in excess of a hundred floods since the period of record extending back to 1900. Most of the information on flood damage has been collected since the 1942 flood, since records were rather meager in the earlier days.

The maximum flood of record occurred in 1908, but the greatest recent flood which caused the most damage occurred in May 1950.

That flood cost 9 lives and caused damage in excess of $3 million, of which $1.7 million was in Lincoln itself. We have computed the average annual damage to be $1.8 million. In Lincoln, which is severely affected, there are almost 1,000 homes subject to inundation and more than 100 businesses. The major flood damage elsewhere is in the small towns which lie along the main watercourses and tributaries and in the agricultural areas. There is a total overflow plain of about 100,000 acres. The basin has been studied in considerable detail both by the Corps of Engineers and the Department of Agriculture.

The present plan which I am presenting represents the Corps of Engineers' portion of the coordinated Agriculture and corps plan. The corps plan consists of 12 reservoirs located on the upstream tributaries above Roca, on Middle Creek, on Haines Branch, and 2 on Wahoo Creek. In addition to the 12 reservoirs there are channel improvements through the city of Lincoln in the vicinity of Ashland and on the main stem and tributaries of Wahoo Creek.

The total cost of this plan, Mr. Chairman, is $15 million, of which the Federal cost is $13,314,000 and the non-Federal cost is $1,686,000. The non-Federal cost includes a cash contribution of $86,200, which arises from the fact that there is land enhancement in the city of Lincoln, and local interests are required to contribute, as is customary in those cases, 50 percent of the amount of the project attributable to that land enhancement.

The effects of this project will be in flood-damage prevention principally, increased land utilization, which I mentioned, and in certain incidental values from fish and wildlife development. The total estimated average annual benefit is $968,000, the average annual cost is $614,000, and the benefit-cost ratio is 1.6. That ratio and the costs and benefits are based upon current prices.

Local interests are required to contribute in addition to the land-enhancement benefit the costs of lands, rights-of-way for the channel improvements, and necessary bridges and bridge alterations, which is customary in projects of this nature. The report has been sub-

mitted to the State of Nebraska and to the interested Federal agencies. These agencies all concurred and the Bureau of the Budget comments also are favorable.

That completes the presentation unless there are questions.

Mr. DAVIS. Does that $14 million cost include the part to be done by the Department of Agriculture?

Mr. BRENNAN. No, sir; that is just the Corps of Engineers.

Mr. DAVIS. For the 12 reservoirs?

Mr. BRENNAN. Yes, sir; the 12 reservoirs and the channel improvement.

Mr. DAVIS. I just noticed here the non-Federal contribution is about 10 percent as related to the total cost. We have been talking in terms of 25 and 29 and 30 percent heretofore.

Mr. BRENNAN. Yes, sir. That is because the contribution of the 50 percent that I mentioned for land enhancement is based upon the lands along the channel in Lincoln, and the cost of the channel improvement through Lincoln is approximately $2 million, so that the proportionate part of the local cost representing land enhancement applied to the full project cost of $15 million is not the same representative proportion as in the other projects. It is based upon the channel improvement through Lincoln alone.

Mr. DAVIS. I understand there is considerable destruction by reason of these floods to the agricultural areas.

Mr. BRENNAN. That is correct, sir, and the effect of those floods is to cause damage, the prevention of which is considered to be a Federal responsibility under the basic flood-control law.

Mr. DAVIS. That is what I thought and I think that is as it should be. What is the difference between that land and the land that Mr. Abernethy was talking about the other day where they are paying 30 percent?

Mr. BRENNAN. The land in the Tombigbee project, that Mr. Abernethy is interested in, which will have a land-enhancement benefit is that land where there will be a change in the use.

Mr. DAVIS. The only thing they want you to do is keep the water off that land?

Mr. BRENNAN. But in doing that, sir, as Mr. Albernethy pointed out, some of the lands which are subject to severe flood damage now and are wastelands or used for low-value crops can be changed to higher type crop use. In this case there are no agricultural lands where we estimate there will be a change in use, but merely a prevention of the damage to crops which are now being grown.

Mr. DAVIS. I am wholeheartedly in favor of projects such as this and I think that the amount of money being paid by the local interests is sufficient but I think on the Tombigbee you got way out beyond anything that is reasonable.

Mr. BRENNAN. On the Tombigbee there are two types of flood-control effects. One is prevention of flood damage for which there is no cash contribution required. The other is the part to which you refer, the 30 percent.

Mr. DAVIS. You think they might improve the lands to bring them up to more valuable status?

Mr. BRENNAN. Yes, sir; that is the basic premise upon which the land enhancement is based.

Mr. DAVIS. Mr. Mack?

Mr. MACK. I think the subject is thoroughly covered.

Mr. DAVIS. Any further questions?

Mr. CRAMER. The difference between this and the Tombigbee so far as local contribution is concerned is that in this instance there will be no improvement or benefit in value to the property owner. Rather, it is only a flood-control or flood-preventive measure as compared to an increase in value to the property owner in the Tombigbee situation.

Mr. BRENNAN. Yes, Mr. Cramer.

Mr. CRAMER. That is the theory behind it?

Mr. BRENNAN. Yes, sir, with the exception of the relatively small area in Lincoln which will obtain land enhancement.

Mr. CRAMER. The estimate of benefit to the landowner in this instance, as compared to Tombigbee, is on the same basic concept and principle?

Mr. BRENNAN. Yes, sir.

Mr. DEMPSEY. Let me ask you something. The benefit accruing to this land is because you are keeping floodwaters away and not destroying; is that right?

Mr. BRENNAN. That is correct, sir, we are preventing floodwaters from damaging the crops which are being grown.

Mr. DEMPSEY. That is all they want on the Tombigbee project. That is exactly what they want you to do.

Mr. BRENNAN. That is correct, sir, but as Mr. Abernethy pointed out, in so doing we automatically cause certain lands which are of low value now to be put to a greater and higher use.

Mr. DEMPSEY. Have you arranged so that the benefits in dollars would be paid on that land only and not on all the land?

Mr. BRENNAN. Yes, sir, the benefit for which there will be a cash contribution is only on those lands which will obtain this land enhancement, but we do not assign the cash contribution to specific parcels of land. We merely set the requirement up as an overall local contribution and then the local districts or organized groups can, of course, make any arrangement among themselves that is proper.

Mr. DEMPSEY. I do not like your theory of doing the job down there on that basis because, if there are some lands in this category they should not be penalized because there are some other lands to be benefited.

Mr. BRENNAN. The local districts could, of course, sir, find some way of securing reimbursement only on those lands for which we estimate increases in value, that is increases in enhancement and not on those lands which merely obtain flood-damage protection.

Mr. MACK. Mr. Brennan, in arriving at the decision to charge something to the area for enhancement of land value, when and how was the formula established? Is it the engineers who created the formula or did some law of Congress do that?

Mr. BRENNAN. Sir, the most firm establishment of that policy was in the Bureau of the Budget Circular A–47, which was issued in December 1952. However, the theory or concept of land enhancement had been recognized prior to that time and in fact applied in one very major project in central and southern Florida as early as 1948.

Mr. MACK. Prior to 1948 there was no charge made for land enhancement?

Mr. BRENNAN. There may have been some isolated cases, Mr. Mack. I am not prepared to say there were none, but I do not believe there were very many.

Mr. MACK. Did the Budget Bureau in the circular given to you instruct the Army engineers to make charges for land enhancement?

Mr. BRENNAN. I believe the circular reads that it will be the policy of the executive department to follow the rules laid down in that circular which included the formula for this land enhancement. However, the circular was not completely mandatory; it still permitted the agencies to make certain appeals or to come back to the Budget if they felt that certain rules were not appropriate under their own laws or legislation.

Mr. MACK. Is the Department of Agriculture in its public works also making charges for land enhancement?

Mr. BRENNAN. The local cooperation set up by the Department of Agriculture at the present time is in accord with Public Law 566, which treats of other matters rather than land enhancement. There are representatives of Agriculture here, I think possibly they would be in a better position to answer this specific question on land enhancement than I am.

Mr. DEMPSEY. These charges are predicated upon a regulation rather than a law; is that right?

Mr. BRENNAN. Yes, sir.

Mr. DAVIS. Personally I see a place for the Bureau of the Budget, but the longer I stay here the more I see they are trying to assume the very prerogatives for which we have been elected to represent our people. Some of these days somebody is going to have to take some action to restrict and curb their ambitions. Congress passes a law and they come along and administer it according to the way they see it. I think they are going too far myself, and I see it increasingly so.

Any further questions?

Mr. SMITH. These charges for land enhancement were presented in a few items which came to us in the 1954 omnibus bill, but they are not as much as those in the current proposals, are they?

Mr. BRENNAN. The maximum amount in the current program, I believe, is greater than the maximum amount in the 1954 omnibus bill, the Tombigbee project had a total cash contribution in excess of $6 million which I believe exceeds any in the 1954 bill. I am speaking from memory on this.

Mr. CRAMER. Is it not true that the land enhancement cooperative amount, the contribution in the central and southern flood control is quite substantial? How much is that? It is judged on the same principle and theory?

Mr. BRENNAN. Yes, sir, the principle is the same. In those days the mechanics of the computation were slightly different but the principle is the same. It represents a substantial portion.

Mr. CRAMER. Many millions of dollars involved in that local contribution?

Mr. BRENNAN. Yes, sir.

Mr. CRAMER. It is not an unusual situation nor is it an unusual amount. It is a question as a factual situation. Obviously they differ

as to what the increased value of the land would be in each factual situation, is that not true?

Mr. BRENNAN. Yes, sir, it depends entirely upon the amount of land enhancement. If it bears a large ratio to the total benefit, the land enchancement contribution is correspondingly high.

Mr. CRAMER. Is not the ratio high in central and southern flood control? I believe it is high.

Mr. BRENNAN. In the original authorized project, which is termed the first phase, I believe it is approximately 30 percent.

Mr. CRAMER. That is my recollection.

Mr. SMITH. This committee modified the central and southern Florida project when it passed on it in 1954, did it not?

Mr. BRENNAN. That is correct, sir.

Mr. SMITH. And the modification resulted in less cost; did it not have the effect of doing that?

Mr. BRENNAN. The modification applied to those parts of the project which had not previously been authorized and the amount of local contribution was to be based upon a determination to be made by the Chief of Engineers after studies which have not yet been completed.

Mr. SMITH. As I recall the committee took tentative action when we were marking up the bill in 1954 and we later changed it with the idea that our modification would result in some reduction of local cost that we did not believe they should pay.

Mr. ROGERS. I hope that is going to be true, but actually what happened, I believe, was you made it retroactive. You said any ratio that is worked out for the cost-benefit would be retroactive to anything after the first phase.

Mr. SMITH. I know that was one of the considerations used in the reconsideration by the committee at the time we first increased the amount authorized and changed the procedure in the 1954 act.

Mr. ROGERS. Mr. Chairman, I think you have certainly stated a concern that all of the members have here, and that is that the Bureau of the Budget is setting the whole policy and the Congress has not expressed any policy at all on this land-enchancement factor. Evidently, it has all been Bureau of the Budget. I think it would be well to have a representative of the Budget here, and let us go into this business. I think we should.

Mr. DAVIS. We have undertaken to do a conscientious job these last several weeks, and I would like for this committee to discuss the advisability of letting each one of these projects stand on its own bottom because we have some problems—I noticed yesterday in this Sacramento River, the last we did not hear as thoroughly as we did the first, that project will cost over a million dollars, about $1.3 million, and the local contribution there was only $300,000.

So, personally, I think when we do get into executive session we ought to take these cases up one by one and determine for ourselves what we think is the fair formula in the resolving of these matters.

If there are no further questions we will pass on to Mr. Brown. We are particularly interested in what the soil-conservation people are doing. We will call Mr. Carl B. Brown, Director of the Planning Division of the Soil Conservation Service, who will tell us what his Department intends to do about this Salt Creek.

STATEMENT OF CARL B. BROWN, DIRECTOR OF THE PLANNING DIVISION, SOIL CONSERVATION SERVICE

Mr. BROWN. Thank you, Mr. Chairman. We have underway in the Salt Creek Basin at the present time one of the pilot watershed projects which was authorized in appropriation language in the 1954 Agriculture Appropriation Act. This upper Salt Creek pilot project is that part of the total basin above the town of Roca and involves this much of the watershed. That work consists of a combination of land treatment, including grassed waterways and terraces and proper rotations on the land and the other types of practices that are provided for in the current programs of the Department, technical assistance and financial assistance and credit. It includes in addition to that the construction of small upstream structural measures such as floodwater retarding structures, stabilization structures on the major gullies, some channel stabilization and improvement, all of which are designed to reduce the amount of headwater flood and sediment damages in the upper valleys of the area.

This plan has coordinated with the plan recommended to you here by the Corps of Engineers at a meeting held in Lincoln with the sponsoring local organization on November 9 and 10, 1954, at which time the initial plan of the Soil Conservation Service for this upper Salt Creek project and the initial plan for the proposal of the Corps of Engineers was modified to the extent of eliminating all duplication of both benefits and of structures provided for in the two plans.

A number of originally proposed structures by each agency were dropped out so that there is now a single coordinating plan, each part of which is fully justified by the benefits that it provides.

The second activity that we are now concerned with in the basin is that provided for under Public Law 566, the Watershed Protection and Flood Prevention Act. We have received from the local organizations there, the concerned soil-conservation districts, and the Salt-Wahoo Watershed Association, an application for assistance in Oak-Middle Creek segment of this basin, which is the tributary watershed which flows through the Lincoln Air Base. It is this area shown here on the map. Under the provisions of Public Law 566 a plan has been developed by the local organization with the assistance of the Soil Conservation Service and that plan, which is similar in terms of the nature of the program to the work being carried out in the upper Salt Creek watershed, has now been submitted to the other Federal agencies for review as required by the law. Favorable comments have been received from both the Corps of Engineers and the Department of the Interior and from the Governor of the State on this plan. It is now in the process of being transmitted to the Bureau of the Budget for transmission to the Congress in accordance with the provisions of Public Law 566.

In terms of the work which has been accomplished in that area to date, a very large increase in the amount of land treatment work applied on the upper Salt Creek watershed has been accomplished since the program was initiated in 1954. For example, by way of comparison, in the calendar year 1953 there were established in this area 75 acres of grassed waterways and 49½ miles of terraces constructed. During the following year, 1954, after the project was initiated the

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area of grassed waterways was increased to 400 acres and the terraces were increased to 247 miles by virtue of the additional help provided.

Mr. SCHWENGEL. Could I ask a question there? How much territory does that involve?

Mr. BROWN. The figures I am giving now are for the upper Salt Creek project above the town of Roca, this upper end of the watershed.

Mr. SCHWENGEL. That is the miles of grassed waterways?

Mr. BROWN. Miles within this area.

Mr. SCHWENGEL. And miles of terraces, all in that area?

Mr. BROWN. Yes, sir.

Mr. SCHWENGEL. Do you have figures on the percent of land affected in that area by number of miles?

Mr. BROWN. The plan envisions a treatment that will be at least 75 to 80 percent complete for all of the needed conservation practices on the land. At the time this project was started in 1954 we estimate that not more than 10 percent of the needed conservation work had been accomplished on the land.

Mr. SCHWENGEL. That was in 1954. This program envisions taking 75 percent.

Mr. BROWN. That it will get up to something in the order of 75 percent at least, and based on the rate of progress being made during the past 2 years, we feel confident that that will be achieved by the time the project is completed. It appears now that it may take 7 or 8 years altogether to complete the total program.

In addition to that, gentlemen, in terms of structural measures that have been completed in this upper Salt Creek area in the fiscal year 1954, 3 floodwater retarding structures were completed having an aggregate capacity of 693 acre-feet; in 1954, 1 structure was built having a capacity of 1,027 acre-feet, and in 1956, this year, we expect to complete 3 structures having a total of 1,115 acre-feet, and there is projected for next year 5 structures having a total of 1,145 acre-feet.

The estimated total number of structures that will be completed as a part of the coordinated plan with the Corps of Engineers is 27 structures having an aggregate capacity of 8,317 acre-feet. In addition there will be quite a substantial number of stabilizing structures, those are gully control structures, check dams and those kinds of improvements, including channel improvements which do not detain any water.

The expenditures in this project to date have been, in round figures, $199,000 in fiscal year 1954, $198,000 in fiscal year 1955, an estimated $236,000 in this fiscal year.

The estimated total cost of the program at the present time in this upper Salt Creek area is $1,618,000.

Mr. DEMPSEY. Those are earth construction?

Mr. BROWN. Yes, earth-filled dams with a drop inlet tube through the structure which has an uncontrolled outlet on it, which will prevent it from overflowing the channel below the structure. They are essentially similar in design to structures proposed by the Corps of Engineers. They also have emergency spillways around the ends of the structure which are cut in natural earth or rock and which provide safety for flows exceeding the designed capacity of the outlet structures.

Mr. SCHWENGEL. These are purely flood control structures?

Mr. BROWN. Those structures I mentioned are for the purpose of reducing flood damage downstream. There are some combination struc-

tures which prevent the further entrenchment or erosion of the channels upstream, that is grade stabilization, as well as providing controlled release of the flows out of the headwater tributaries. We believe the effect of this program is that of reinforcing the work proposed by the Corps of Engineers. It will do two things. It provides protection on the headwater tributaries which are above the Corps of Engineers' structures which will not be affected by the corps' program and at the same time it provides a higher degree of protection for Lincoln and the area downstream by reinforcing the control.

Mr. ROGERS. Mr. Brown, where does the money come from to build these?

Mr. BROWN. The funds for this activity are included in the Agriculture Department Appropriation Act.

Mr. ROGERS. Is there any local contribution?

Mr. BROWN. Yes, sir.

Mr. ROGERS. How much?

Mr. BROWN. In terms of the total program on the upper Salt Creek area, the original estimates of the pilot program, I will give these first in terms of totals and then in terms of structural work only.

The total program is estimated to cost in round figures $4,195,000 of which the Federal contribution will be $1,618,000. Now, in terms of the land treatment program alone that is being carried on by the people that live on the land there at their own expense, the net cost to the local people for the land treatment phase of the program is $2,228,000. In addition to which the Federal Government will supply technical assistance for planning of the onfarm improvements amounting to a total of $201,000.

Mr. ROGERS. May I ask you—just restricting your figures to your region here we have discussed that you have proceeded with so far—where your cost has been $1,618,000, what local contribution has actually been paid there and what is the percentage?

Mr. BROWN. The figure I gave, $1,618,000, is the total cost which includes the technical assistance of $201,000 that is provided to the local people for their conservation work.

If we anticipate figures only on the structural work which includes the floodwater detention structures, the stabilization measures and channel improvement work, the figures there are approximately these. The Federal part of that cost will be—I am sorry, this figure is not completely revised to reflect overhead cost, but I will give the figures of the original work planned for actual onsite cost. Federal, $1,215,000 and local cost will be $289,000, or approximately 20 percent.

Mr. ROGERS. Out of the $1,618,000, there is a local cost of about $289,000?

Mr. BROWN. No, sir, that is the cost for the total project. In other words, let me put it this way. For the structural phase of the program the Federal Government will pay about 80 percent and the local organizations about 20 percent. For the land treatment phase of the program the Federal Government will pay about 10 percent for the technical assistance and the local organization will pay about 90 percent.

Mr. ROGERS. In your program up here, maybe I have not understood it, but you say the cost is $1,618,000?

Mr. BROWN. To the Federal Government.

Mr. ROGERS. Is most of that, then, concerned with building your structures?

Mr. BROWN. Yes, sir, all but about $200,000 of that is cost for the construction work.

Mr. ROGERS. I see. The $200,000 otherwise is for your technical assistance.

Mr. BROWN. That is right.

Mr. ROGERS. Of the $1,618,000 that you say the local project is going to cost, is that the overall cost or just the Federal cost?

Mr. BROWN. That is the Federal cost and in addition to the Federal cost, as I pointed out——

Mr. ROGERS. $289,000 that it will cost the local people?

Mr. BROWN. That is correct.

Mr. ROGERS. How is that determined? Do you include any land enhancement in that?

Mr. BROWN. We have not determined it on that basis. The local cost there is largely that of acquiring land easements and rights-of-way and providing for changes of bridges and removal of pipelines and that sort of work in this pilot program. The actual construction cost is borne in this pilot project by the Federal Government and all other costs are borne by the local organization.

Mr. ROGERS. What formula do you use to determine what your local contribution will be? Do you have any formula?

Mr. BROWN. In this pilot program it was determined on the basis that local organizations must bear all of the cost of land easements and rights-of-way and changes of facilities required to enable the structures to be constructed.

Mr. ROGERS. You have no formula for determining like we do on flood control. For instance, if there is land enhancement, and so forth, we consider our local people should pay for that. You merely say they must provide rights-of-way and changes in these bridges, and so forth.

Mr. BROWN. I would like to make this clear that this pilot program was originated by the Congress for the purpose of providing demonstrations as a basis for developing a permanent long-range program which has been provided for through the enactment of Public Law 566. Public Law 566 does set up certain cost-sharing requirements by law which were not a part of this original pilot demonstration program which was simply an appropriation item.

Mr. SCHWENGEL. Is it not true that the farmer back away from that dam must cooperate, otherwise you could not go on with the overall program?

Mr. BROWN. That is correct.

Mr. SCHWENGEL. He is contributing about 90 percent in most cases of his own money on his own farm, is that not right?

Mr. BROWN. That is correct.

Mr. SCHWENGEL. To build ponds and to build grassed runways and terraces and that sort of thing?

Mr. BROWN. Yes, sir.

Mr. ROGERS. Is that on his own property?

Mr. BROWN. Yes.

Mr. SMITH. He owns the pond after he builds it?

Mr. BROWN. The title to the structure or the title to the land on which the structure is built remains in the hands of the landowner but he

the overall objective of that program, taking land treatment and struc-

is required to grant a perpetual easement to the Soil Conservation District to provide for the continued operation of the structure's function.

Mr. ROGERS. Is that an actual cash contribution that the farmer must make or is it borrowed money, credit issued to him?

Mr. BROWN. Perhaps in order not to confuse the issue I should explain that under the terms of Public Law 566 under which a very substantial number of projects are being formulated now including that on the Oak-Middle Creek segment, there are definite requirements in the law that local organizations must meet all of the cost of providing land easements and rights-of-way of any water rights that may need to be acquired, they must contract for the improvements which involves an expense to the local organization as a contracting agency and they must guarantee the operation and maintenance of those improvements.

In addition they must provide such share of the cost of construction as the Secretary of Agriculture may deem to be equitable.

Now, the Secretary of Agriculture has established a policy that with respect to construction cost of structural measures local organizations should be expected to bear that part of the cost which is equivalent to the local benefits of the project.

Mr. ROGERS. Is land enhancement part of the local benefit?

Mr. BROWN. We have not developed our analysis on quite the same basis. Local benefits are defined as those benefits which can be identified with direct identifiable beneficiaries and whether it is land enhancement or whether it is a farm or piece of bottom land that you can pin down that the damages from flooding provide a definite elimination of damages from flooding, would provide definite benefits for this individual landowner that would be a local benefit. We have not distinguished between land enhancement and flood damage abatement insofar as it can be directly identified with local beneficiaries.

Mr. ROGERS. You have determined the local benefit for this project to be about 20 percent?

Mr. BROWN. No, sir. As I say, this project was undertaken as a demonstration project before this present Public Law 566 program.

Mr. ROGERS. None of the policies that may later apply, apply to this project, is that true?

Mr. BROWN. Now the policy that would apply to this Oak-Middle Creek project is the one that I am speaking to now.

Mr. ROGERS. Let us confine it down here to the one we have gone pretty far on that you started testifying on. You really have not applied any policies to this, but are trying to determine what your policies will be as a result of this, is that right?

Mr. BROWN. The present policies under 566 were not applied to this pilot project.

Mr. ROGERS. The Federal Government has gone in there and the local people just provided rights-of-way and change of bridges, and so forth.

Mr. BROWN. The requirement was that all land easements and rights-of-way and all changes in facilities must be provided by the local organization, and they must carry out the necessary land treatment work on their own properties before the structures would be built, and

the overall objective of that program, taking land treatment and structural work together, was that of approximately a 50–50 cost sharing on the total project. That is still the objective of the 566 program but there are some other definite requirements.

Mr. ROGERS. On 566, have you a definite formula yet that has been placed in black and white that we can look at?

Mr. BROWN. Yes; we have a formula, but it is not the kind of formula where you can determine what the cost sharing would be prior to the making of the survey. In other words, it is necessary to make the survey to determine the classification of benefits.

Mr. ROGERS. I realize that, but I want to know if you have a policy set down that says, "Land enhancement, so much is to be considered," so we know the factors that you are going to consider in making the survey, that you are looking for in the survey. Do you have that set down where we can look at it?

Mr. BROWN. Yes, sir.

Mr. ROGERS. Will you furnish it to the committee?

Mr. BROWN. We will be glad to furnish it for the record. That is included in the handbook.

Mr. ROGERS. That will give us at least some basis that you are working on.

(The above-mentioned information follows:)

The information requested is from section 7 of the Interim Watershed Protection Handbook issued by the Soil Conservation Service on April 25, 1955, to provide rules and regulations for the administration of the program authorized by Public Law 566, 83d Congress:

H. SUMMARY OF COST-SHARING REQUIREMENTS

1. Cost sharing for each watershed project will be computed and negotiated consistent with policies established by the Secretary of Agriculture.

2. The aggregate non-Federal share of the cost of watershed projects under the provisions of this act throughout the Nation should be at least 50 percent. Therefore, cost sharing on each watershed project should be considered with cognizance of this principle.

3. Cost sharing in individual watershed projects will be based on the determination of the kinds and amounts of various benefits and the degree of their identification with local beneficiaries.

4. Local beneficiaries will be expected to pay for the construction costs allocable to clearly identifiable benefits that accrue directly to them.

5. Local organizations or landowners and operators will be required to bear the cost of—

(*a*) Land easement and rights-of-way on non-Federal land;

(*b*) Necessary water rights;

(*c*) Capacity in structures for purposes other than flood prevention and features related thereto;

(*d*) Operation and maintenance of works of improvement on non-Federal land and of works of improvement other than land-treatment measures on Federal land to the extent that benefits accrue to non-Federal beneficiaries;

(*e*) Administration of contracts let by other than the Federal Government; and

(*f*) Installation of land-treatment measures on non-Federal land.

6. Local organizations will be expected to bear—

(*a*) That part of the cost of constructing or installing structural works of improvement, exclusive of installation services, which is equal to the ratio of local benefits to total benefits, and

(*b*) All construction costs for water distribution and other facilities for purposes other than flood prevention and features related thereto.

7. The Federal Government will bear the cost of—

(*a*) Planning services;

(b) Technical assistance;
(c) Installation services;
(d) Installation of land-treatment measures on Federal land, including operation and maintenance during the installation period; and
(e) That part of the construction cost of structural works of improvement for flood prevention which is equal to the ration of *nonlocal* benefits (allocable to unidentifiable and Federal beneficiaries) to total benefits.

8. The Federal Government may share a portion of the costs otherwise accruing to the local organization under item (6) above provided that—
(a) Such sharing of costs is justified in detail in the work plan wherein the reasons for doing so are set forth in detail; and
(b) The proposed Federal share of the cost for each type of works of improvement, such as flood prevention, irrigation or drainage does not exceed the Federal contribution that would be available for similar measures under other project-type programs specifically authorized by Congress or approved by the Bureau of the Budget.

Mr. SMITH. I think Mr. Rogers brought it out, but I have a specific question. The policy of the Soil Conservation Service is not to make any charge for the equivalent of what the Corps of Engineers call land enhancement. At least it has not been established as such so far, has it?

Mr. BROWN. Our cost-sharing provisions under 566 go further than land enhancement. They take into account all of the benefits, whether it is land enhancement or flood damage reduction, that accrue to identifiable local beneficiaries.

Mr. SMITH. I understand that but you do not have anything set up in regard to land enhancement as such.

Mr. BROWN. Mr. Smith, we do determine what the land enhancement is as a part of the economic evaluation separately from the flood damage reduction, but we do not use that in the same way that the Corps of Engineers does in determining cost sharing.

Mr. ROGERS. I wondered if this directive from the Bureau of the Budget was taken into consideration. Did that apply to your program as it did to the Engineers?

Mr. BROWN. Yes, sir; it would, we feel, apply equally to this program. However, our requirements, we feel, exceed those required in A–47.

Mr. BALDWIN. Will you yield for a question?

Mr. SMITH. Yes.

Mr. BALDWIN. Let me see if I understand the 566 procedure. Do I understand that under Public Law 566 you not only assess land enhancement as we understand it from the Corps of Engineers projects, but you also assess on the local people involved any other type of improvement besides land enhancement such as protection of buildings or anything else of that kind from a flood-control project?

Mr. BROWN. Let me see if I can explain that more fully.

We determine all of the types of benefits that would accrue from a plan of land treatment and structural measures. Those benefits would include flood-damage reduction, whether to farmlands or roads and bridges or buildings in towns or whatever. We make the same kind of determination as made by the Corps of Engineers. We also determine land enhancement.

Now our cost-sharing formula is based in its first element on the amount of the total benefits that can be identified with beneficiaries within the project area—clearly identifiable direct local beneficiaries. For instance, indirect damages are not considered those that can be

identified with a particular beneficiary so they are not a part that the local organization would be expected to assume responsibility for.

After that determination is made, we go to the local organization and show them what the cost-sharing requirements would be in accordance with the Secretary's policy. The Secretary's policy, however, states that if the local organization considers that the share of the cost that they would be required to bear in accordance with that determination is inequitable, they may state to the Secretary their reasons why they believe that amount of cost is inequitable or beyond their means to bear and that the Secretary will, in such cases, consider an adjustment in the cost whereby the Federal Government will assume a larger part of the cost than that formula would require.

So in the final analysis the cost sharing on those projects that have been planned has been on a negotiated basis, in most cases representing a reduction in the amount that the local organization would have to bear and an increase in the Federal share.

To give you the figures on the first 30 projects that have been completed under Public Law 566, the overall cost sharing for structural and land-treatment measures together has been about 55 percent non-Federal and 45 percent Federal.

On the structural works, only in those projects the Federal cost has been about 68 percent and the non-Federal cost 32 percent. That is the average for those 30 projects.

Mr. SMITH. In regard to that cost, non-Federal cost for the structural works, how much of that has been in cash?

Mr. BROWN. Sir, that is a little difficult to determine how much of it would be in cash for the reason that in going out to acquire land easements and rights-of-way, which make up a part of that cost, in some cases they may be acquired by donation, which would represent in effect a voluntary cash contribution; in other cases they have to be bought.

Mr. SMITH. I realize it would be difficult but is it fair to say the cash in that is a small percentage?

Mr. BROWN. I would not say that. Actually, in terms of the contribution toward the cost of the contracts alone, the local share will be in the neighborhood of 15 percent, we estimate, on the actual construction, and the rest of it will be on land easements and rights-of-way and other costs incurred such as administration of contracts.

Mr. SMITH. I was very much interested in your statement that you took into consideration in evaluating these local costs the ability, of the people who would be involved, to pay. That, apparently, is something that the Corps of Engineers has never considered under the apparent decision of the Department of the Army to accept the Budget's recommendation as a straitjacket. The same Bureau of the Budget that gives directives to the Corps of Engineers gives directives to the Department of Agriculture, do they not?

Mr. BROWN. Yes, sir.

Mr. SMITH. I think your Soil Conservation Service is to be commended for their policy and I think it certainly goes along far more in line with what Congress intended for the purpose of this program than the interpretation that the Corps of Engineers has been making. I think there is no question that intentionally or not the Corps of Engineers has been making interpretations designed to prevent construction of flood-control projects of a certain nature, no matter how

they express it here. Some of these qualifications they come up with in the way of approval involve such large local contributions, and it is made clear they understand that, if these qualifications are held to, there will never be such project.

Mr. BALDWIN. You mentioned that, although in some instances the local contribution may not be so great, we have in the middle of my district in Walnut Creek watershed in Contra Costa County, Calif., one of these soil-conservation projects, and the local people had a vote on the bond issue amounting to between $6 million and $7 million, and the Federal contribution was only $2 million, and the bond issue did not pass, and it is my understanding that the Federal funds have been withdrawn as a result of that bond issue not passing.

I point that out that the local people involved there were facing a bond issue of $6 million or $7 million. Do you happen to be familiar with that project?

Mr. BROWN. Yes, sir. That was only a withdrawal insofar as this fiscal year is concerned because of inability to let the contracts before the 30th of June and the money was placed on another project so that it could be obligated for other work, but the whole situation is now being explored by our representatives with the local organization as to the future course of action on the project.

Mr. BALDWIN. Does that mean that the money for this year has been withdrawn, but would still be available in a future year in case they could provide their local share?

Mr. BROWN. Funds for these pilot watershed projects are not appropriated by project items. It is a lump sum, and this withdrawal was only in order to make the maximum obligations this fiscal year. Because of the bond-issue situation we could not obligate them before the 30th of June.

Mr. BALDWIN. These people in this particular watershed are not permanently penalized by not having met it this particular year?

Mr. BROWN. Not so far as this money is concerned.

Mr. ROGERS. I do not want to belabor too long. It has been a very enlightening discussion. I want to know if you can tell us, Mr. Brown—you say it has worked out on the overall program of your 30 projects under Public Law 566, there has been about a 55 percent non-Federal contribution. I presume a lot of that includes the actual soil-conservation program on the individual farmland?

Mr. BROWN. Yes, sir.

Mr. ROGERS. Which accrues to the benefit of that particular man.

Now, does he obtain Government loans or credit, or may he or has he in these programs obtained Government loans or credit to make those improvements or is there any such program for him to do that?

Mr. BROWN. Yes, sir, he may obtain loans under the provisions of the Soil and Water Conservation Loan Authority of the Farmers' Home Administration.

Mr. ROGERS. Does that carry interest?

Mr. BROWN. That is an interest-bearing loan; yes, sir.

Mr. SCHWENGEL. The loan must be repaid?

Mr. BROWN. Yes.

Mr. SCHWENGEL. A secured loan?

Mr. BROWN. Yes, sir.

Mr. ROGERS. It is for his own property.

Mr. SCHWENGEL. I understand that.

Mr. ROGERS. I might say those figures are exclusive of any aid obtained through the agricultural conservation program. In other words, those are net figures of his cost over and above what he may get through his SCP payments.

Mr. CRAMER. Mr. Brown, you indicated that in these cases, as a result of negotiation and otherwise, that there has been some reduction in local contributions. As an average, can you indicate what that percentage of reduction has been? Has it been a substantial or a minor reduction?

Mr. BROWN. Yes, it has been a rather substantial adjustment. I am sorry that I do not have that figure.

Mr. CRAMER. Can you give the committee an example, for instance?

Mr. BROWN. I can give you an example. On the Oak Middle Creek plan, in the Salt Creek Basin, under our determination of allocations of benefits and structural work, it was determined that the local interests would be expected to contribute $232,000, in round figures to the construction costs. They have asked for and the Department has agreed to a shift in costs of $162,084.

Mr. CRAMER. A reduction of that much, is that right?

Mr. BROWN. A shift from the local cost to a Federal cost of that much of the $232,000.

Mr. CRAMER. More than half of it?

Mr. BROWN. Yes, that is right.

Mr. CRAMER. That is, on construction?

Mr. BROWN. Yes that is just on the construction cost.

Mr. CRAMER. How about the other part?

Mr. BROWN. So that the sum total on costs of structural measures alone on this Oak Middle Creek plan is a Federal cost, in round figures of $403,000 and a non-Federal cost of $171,000.

Mr. CRAMER. All right; how about other than structural costs?

Mr. BROWN. On other than structural measures, the Federal cost will be $103,000 and the non-Federal cost will be $557,000.

Mr. CRAMER. To what extent was that a compromise?

Mr. BROWN. That is not a compromise at all. That is a fixed requirement that the local people must apply all of the land treatment measures at their own expense.

Mr. CRAMER. Anything done on the land in the form of land treatment is not subject to negotiation or compromise, but the structural costs are?

Mr. BROWN. The direct cost of construction is the only part which is subject to negotiation.

Mr. CRAMER. If I understand it correctly, then your situation can be distinguished from the Corps of Engineers, not that I necessarily agree that it should be distinct or that there should not be negotiation, but it seems to me it can be distinguished on this basis, that in your benefit you not only include the land enhancement, which is a determinable factor up to a given point, and the land gets the benefit, and a given owner also, but in addition to that, you include the benefits of bridges, roads, public buildings, private buildings and otherwise, much of which is not attributable to a given owner, but to the general public as a benefit, and therefore we can see here that there is more justification of negotiation and reduction. That is where you can attribute

the land enhancement involved to an individual, which is the Corps of Engineers' situation, as compared to yours, where you have all of these elements involved. It seems to me that there is greater justification there, although the advantages of the construction buildup should be given some weight.

Mr. SMITH. Will you yield, Mr. Cramer?

Mr. CRAMER. Yes.

Mr. SMITH. As I understand the corps' definition, the land enhancement involves individual changes in farming practices, and certain potential changes in farming practices, and certainly that could be attributed to an individual as well as any improvement otherwise.

Do you consider, for instance, if a man is going to have protection through one of your structures, that he might be able to raise Herefords instead of Jerseys and, therefore, have a better situation?

Mr. BROWN. No, we do not consider a change from one crop to another crop as being land enhancement.

Mr. SMITH. That is one of the things that the corps considers.

Mr. CRAMER. I do not think the policies of the two are as inconsistent as that by the weight of his explanation.

Mr. SMITH. The fact that they changed crops was one of the things they considered.

Mr. DEMPSEY. Land treatment means putting fertilizer on it and performing such other conservation operations, as furrowing or terracing—the overall treatment of the land—and the cooperation benefits go to the individal farmer.

Mr. CRAMER. That is the same as the Corps of Engineers does, and the same principle is involved in that it benefits you or the individual farmer.

Mr. DEMPSEY. No, it is quite different. There is land which is being used and benefited.

Now, the Army engineers say that this land is going to be benefited and that the farmer can plant crops on it, but he cannot plant them because the Department of Agriculture has reduced his acreage. You know it is going to reduce acreage this year. Maybe the land might produce more, if the farmer could produce on it, but he cannot produce.

Then, another thing, I do not think you will find the farmers in every State—I am basing that opinion on a chart I saw the other day—I do not think you will find that they can dig down in their jeans and bring up $4,500,000. That, I doubt, and I know of no bank that would put up that much money for them.

Mr. BALDWIN. I can say from the experience with one of the pilot watersheds in our district that this assessment of benefits is a material thing from a financial standpoint, and that by no means is it limited to these erosion controls up in the upper reaches, because we had a specific case where the local contribution was three times the Federal contribution.

Mr. DEMPSEY. I am very proud of this conservation work and I think that they are doing a magnificent job. I am not criticizing the Soil Conservation Service at all.

Mr. ROGERS. I wonder if Mr. Brown could furnish the committee with a list of the 30 projects where you have had negotiation—with the extent and the results of that negotiation?

Mr. BROWN. Yes, sir.

Mr. ROGERS. Thank you.

(The matter referred to is as follows:)

The 30 projects referred to are as follows:

Cummins Creek, Tex.	Arroyo Grande, Calif.
Bear Creek, Ga.	Bayou Dupont, La.
Bear Hole, Del.	Stony Brook, N. J.
Big Wewoka Creek, Okla.	Twin Creek, Ky.
Little Wewoka-Graves Creek, Okla.	Cimarron Watershed District, Kans.
Upper Grave Creek, W. Va.	Rocky Creek, Ga.
Upper Brushy Creek, Tex.	Oak-Middle Creek, tributaries of Salt River, Nebr.
Lower Brushy Creek, Tex.	Johnson Creek, Tenn.
Hatch Valley Arroyos, N. Mex.	Johnsons Craw, Tex.
Turkey Creek, Tex.	Rush-Pine Creek, Minn.
Plattsmouth, Nebr.	Wray watershed, Colorado
Mill Canyon-Sage Flat, Utah	Little Youghiogheny River, Md.
Lake Placid-East Chain of Lakes, Fla.	Dona Ana Arroyo, N. Mex.
Long Branch, Okla.	Elm River, N. Dak.
Harmony Creek Iowa	
Tiskilwa, Ill.	

These projects are scheduled for completion in from 1 to 10 years. The total cost of the 30 projects is estimated at $35,623,000, ranging from $60,500 to $5,561,100.

The estimated total Federal cost of these projects is $15,881,900, or 44.6 percent of the total cost. The estimated non-Federal cost of the projects is $19,741,100, or 55.4 percent of the total cost.

Federal costs include technical assistance for land-treatment lands, and a portion of the construction cost. Non-Federal costs include all land-treatment measures on privately owned lands; land, easements, and rights-of-way; operation and maintenance; and administration of contracts. The only item subject to negotiation has been the respective Federal and non-Federal contributions to construction costs of structural measures. Under this item the Federal Government has agreed to pay $11,383,000 and the local organizations have agreed to pay $2,452,900, or 17.7 percent. The total non-Federal contribution to costs of structural measures, including land, easements, and rights-of-way; operation and maintenance; and administration of contracts, as well as construction, is 32 percent.

Mr. MACK. I would like to develop some information concerning the overall scope of this soil-conservation program. How much money was included in the budget this year for this type of program?

Mr. BROWN. Well, the bill that passed the House yesterday afternoon included an increase on this watershed protection item of $1,500,000. That brought the amount to $17,500,000 for the pilot projects continuation and the 566 projects that will be initiated.

It increased the amount in the flood-prevention item for the 11 watersheds originally authorized under the Flood Control Act of 1944 to a total of $12 million. So that would be a total of $29,500,000.

Mr. MACK. Referring to this $17 million, is any of that money involved in providing flood-control protection?

Mr. BROWN. Yes, sir; that is the fund that is used for these improvements that I am just describing.

Mr. MACK. To a large extent all of those are flood-control projects?

Mr. BROWN. They are a combination of land treatment and flood prevention and those funds include funds for technical assistance on the land-treatment work, plus construction downstream, retarding construction, erosion work, and channel stabilization.

Mr. MACK. Has any estimate been made of the total overall cost of doing this entire job over a period of years? How much money would it require the Federal Government to spend in order to do this job that you people want to undertake?

Mr. BROWN. I doubt if we are far enough into this activity yet to envision any overall figure with any degree of competence at this time.

Mr. MACK. How do the rural communities initiate these projects? Do they form improvement districts and then request the Department of Agriculture to carry out a program?

Mr. BROWN. Under the provisions of Public Law 566, any local organization, which has the authority under State law to carry out, operate, and maintain a project for the purpose indicated in the act, can initiate an application for assistance from the Department of Agriculture.

Mr. MACK. Then under the State law, the State could levy assessments against the real estate in the area to pay for the local contribution?

Mr. BROWN. Yes, sir.

Mr. MACK. That is all.

Mr. BUSH. Mr. Chairman.

Mr. DEMPSEY (presiding). Mr. Bush.

Mr. BUSH. Mr. Chairman, I am pretty much confused about this soil-conservation matter. I am very much in favor of it and I think it is a very worthwhile project. How long has it been since we have considered this soil-conservation program on this larger scale?

Mr. DEMPSEY. You mean on the watershed scale?

Mr. BUSH. Yes.

Mr. BROWN. Perhaps I should explain these watershed projects are a supplement to, or a step in connection with, Public Law 566. They are designed to bridge the gap between a national program of assistance to individual farmers and ranchers, and the major improvements located downstream, such as the Corps of Engineers and the Bureau of Reclamation have undertaken.

The national program, that is, the soil-conservation program, was initiated in 1935 under the Soil Conservation Act, and the Soil Conservation Service now provides assistance to more than 2,700 soil-conservation districts covering about 90 percent of all the farms and ranches in the Nation.

Now this watershed activity was first originated under the Flood Control Act of 1936.

The first projects that were approved for operation were included in the Flood Control Act of 1944. Those were 11 projects of larger size. There were never any additional authorizations under the Flood Control Acts.

The second step was the pilot watershed program, and all 60 pilot watersheds were started in 1954 under the 1954 Appropriation Act.

In 1954 then, this Public Law 566 was passed by the Congress and under that act we have now received in Washington approximately 470 applications for assistance.

We had authorized up until last week 159 watersheds for planning. Plans for the first 30 of those have been completed.

Thirteen of them have been transmitted to the Congress by the Bureau of the Budget and are now in their 45-day review period.

Mr. BUSH. Then it was in 1953 or 1954 that your program was begun in watershed soil-conservation plans?

Mr. BROWN. Yes, with the exception of the older 11 projects on which work got underway on a substantial scale about 1948.

Mr. BUSH. It was my understanding that before that, most of the soil-conservation planning was technical advice, and that Federal grants were given to the States, and it was a State organization that looked after soil conservation, and that it was managed pretty well by the States. Does that practice still continue?

Mr. BROWN. All programs of the Soil Conservation Service give assistance to local organizations. In our broad national program, we provide assistance to local legally organized soil conservation districts which are instrumentalities of the State government, organized under State law.

Now the watershed program, speaking now of Public 566—in that program we are providing assistance, and a local legal organization has to apply for assistance under the provisions of that act. Our assistance there is both technical and financial, but all of the contracting will be done by the local organization under this new program.

Mr. BUSH. You are working in connection with the Corps of Army Engineers on the flood-control aspects of these projects?

Mr. BROWN. In any watersheds where there are programs under consideration by the Corps of Army Engineers we work with them in the coordination of this upstream watershed program activity with the plans that they are developing downstream in connection with their program.

Mr. BUSH. You do not plan that these small reservoirs will take the place of large reservoirs where there is great destruction and great need for reservoirs to be built, for large reservoirs to be built, in order to take care of flood damage in large areas?

Mr. BROWN. No, sir; we do not make the claim and never have made the claim which some people have made, that this upstream part of the program will do that job. We believe that both this program and the downstream works, and improvements, are needed to do that job, to give protection upstream as well as downstream.

Mr. BUSH. They can be effective by working together.

Mr. BROWN. Yes.

Mr. DEMPSEY. I want to call the attention of the committee to the fact that there are many other witnesses here who have come long distances to testify on this matter. I do not want to cut anybody off, but we are running out of time.

Mr. CRAMER. As I understand it, your system in the watershed projects which you have projected has been on approximately a 50–50 contribution basis, local, and Federal?

Mr. BROWN. Yes, sir.

Mr. CRAMER. That, incidentally, is much higher than any project I know of, compared to the Army engineers. On a percentage recommendation, the highest I have ever heard of is about 30 percent in the case of the Army engineers regardless of what formula you might use.

Thank you.

Mr. DEMPSEY. Are there any further questions?

Mr. SCHWENGEL. All of the farmers in this area have the benefit of the present tax law which gives them a chance to take credit on their income-tax returns for improving their lands.

Mr. BROWN. Yes; for permanent type improvements on their properties.

Mr. SCHWENGEL. In your opinion, are the farmers attracted by that? Do they understand it?

Mr. BROWN. I do not know the answer to that. I imagine that most of them at this time are taking advantage of it.

Mr. SCHWENGEL. If it is good on the farm, would it be well to get that same point to be applied to people who could cooperate in an overall program in a small community like a town or village? They cannot claim credit for tax benefits for those improvements. In your opinion would it be good to extend that philosophy a little further?

Mr. BROWN. I do not know that I am in a position to answer that without giving some thought to its implications, Mr. Schwengel.

Mr. SCHWENGEL. In this work you have to work with the Corps of Engineers?

Mr. BROWN. We do work with the Corps of Engineers where they have any projects in the same areas that we have.

Mr. SCHWENGEL. Do you have any difficulty at all in getting along with them?

Mr. BROWN. We have had several very successful coordinated projects which have been developed, this being one of them. Similarly the Richland Creek watershed in Texas; where coordinated plans were developed. Actually we are just getting underway to the stage where we are beginning to get into areas where there may be mutual interests which will lead to this type of coordination.

Mr. SCHWENGEL. I was interested in what you said about the importance of working together. It is true if the soil conservation program could be extended all across America that the incidence of floods would be substantially reduced; is that right?

Mr. BROWN. I think that there is no question about that, sir. We have made estimates in the department and they have been widely published that something like half of the total flood damages in the country occur above points where the Corps of Engineers have historically planned improvements, which would not be affected by the types of programs that they are carrying out. We believe that the correction of those damages is needed and that it can be best achieved by this watershed type of program.

Mr. SCHWENGEL. Theoretically, if all of America would practice this program of which this pilot watershed program is an example, we could clear up all of the streams in America, could we not?

Mr. BROWN. I would say that we could very substantially alleviate the problems on those streams.

Mr. SCHWENGEL. Mr. Chairman, I would like to say that I think this is one of the greatest programs we have ever had for America. I am wholly in sympathy with this type of thing.

Mr. DEMPSEY. If you are referring to soil conservation, I certainly agree with you.

Mr. SCHWENGEL. Thank you.

Mr. DEMPSEY. Thank you very much, Mr. Brown.

STATEMENT OF HON. PHIL WEAVER, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA—Resumed

Mr. WEAVER. Mr. Chairman, before proceeding with the next witness, I would like to ask your permission to insert in the record a copy of a letter which I received from General Itschner, the Assistant Chief of Civil Works, a letter under date of May 11, 1956, and some answers to questions which were submitted relative to this problem.

Mr. DEMPSEY. Would you like to have this matter inserted at this point in the record, Mr. Weaver?

Mr. WEAVER. Yes, sir; at this point in the record.

Mr. DEMPSEY. Without objection, it will be inserted at this point in the record.

(The matter referred to is as follows:)

MAY 11, 1956

Hon. PHIL WEAVER,
House of Representatives, Washington, D. C.

DEAR MR. WEAVER: I have received your letter of May 1, 1956, referring to the bill H. R. 6942, which you have introduced, to authorize the improvement of Salt Creek and its tributaries in Nebraska, and requesting answers to certain questions dealing with our ability to initiate work on that project.

I have discussed this matter with the division engineer, Missouri River division, who has jurisdiction over the work on Salt Creek and its tributaries, and am pleased to furnish answers to your questions on the attached sheet.

I trust this information will meet your needs, and will be glad to furnish any further details you may require.

Sincerely yours,

E. S. ITSCHNER,
Major General, United States Army,
Assistant Chief of Engineers for Civil Works.

1. Question. What is the current status of the corps' studies in the Salt Creek Basin?

Answer. We have completed a survey report in which a plan of improvement for flood control has been recommended. We have not had authority on further study. However, I would like to point out that our survey report study, because of necessary coordination with studies of the Department of Agriculture, and because of the intense interest of local organization in the development of our plan, have been somewhat more extensive and detailed than would normally be the case of studies of this nature.

2. Question. Is the corps in a position to undertake planning studies during fiscal year 1957?

Answer. We can begin these studies as soon as planning funds are available. It is desirable that these planning studies be initiated as soon as practicable since it will be necessary for us to work very closely with local organizations in the determination of the exact sites for the detention reservoirs and in determination of reservoirs in which local interests may desire that larger permanent pools for fish and wildlife conservation be provided at local expense. You will recall that the chief of engineers' recommendation of the Salt Creek project provides specifically for adjustment of exact reservoir sites in cooperation with local interest where alternate sites are available; and for increases in the size of permanent pools for fish and wildlife conservation where adequate reservoir capacity is available and local interests agree to bear the cost of additional rights-of-way and fencing required thereby.

3. Question. What amount of planning funds could profitably be used during fiscal year 1957?

Answer. It is estimated that for the first year of planning about $150,000 would be required to advance planning to the point where construction could be initiated on some units of the project. This amount would permit necessary work on a general design memorandum on the entire project plus specific design memoranda and construction plans and specifications for the first project features to be placed under construction. I believe that all of this work could be accomplished during the first year. Progress in planning will depend to some extent, however, on

the rapidity with which we can reach agreement with local interests on exact reservoir sites and on permanent pools for conservation.

4. Question. Which project features would be placed under construction first?

Answer. Local interests are extremely anxious for construction of the Antelope Creek Reservoir. To a great extent this reservoir is an independent feature of the project and well suited for selection as the first unit to be placed under construction. One or two other reservoirs on tributaries of Salt Creek above Lincoln might also be selected for early construction with the reservoirs selected depending upon the results of our planning studies. General improvement and levee work should be initiated at the mouth of Salt Creek. Improvements in the reach from Ashland to the mouth, constitute a desirable initial general improvement feature.

5. Question. Would it be possible to initiate construction on this project during fiscal year 1957?

Answer. I believe that it would be possible to accomplish necessary planning studies at a rate which would permit award of a contract for construction of some project feature late in the first fiscal year. Again, this will be dependent however, on the rapidity with which we can reach agreement with local interests on exact reservoir sites and enlarged permanent pools for fish and wildlife conservation.

6. Question. What amount of construction funds could be used in fiscal year 1957?

Answer. I believe that an appropriation of $300,000 might be needed in the first year.

Mr. WEAVER. We have many witnesses here today who have traveled many miles to be here with you gentlemen and to present their story.

I am happy to introduce as our next witness an individual who in private life, and who, as Governor of Nebraska, has always displayed a keen interest in flood control matters. He is at the present time attorney for the Salt-Wahoo Watershed Association. Governor Crosby.

Mr. DEMPSEY. Governor Crosby, we are delighted to have you with us and we will be very glad to hear you, sir.

STATEMENT OF HON. ROBERT M. CROSBY, EX-GOVERNOR OF THE STATE OF NEBRASKA AND ATTORNEY FOR THE SALT-WAHOO WATERSHED ASSOCIATION, LINCOLN, NEBR.

Governor CROSBY. Mr. Chairman, and members of the committee, as Congressman Weaver said, we have not many, but we do have some men who have spent their lives in this area, and who have come from Nebraska this morning to speak to the committee on this important matter.

Now, I know that the hour is late. So, in order to save the time of the committee, I ask leave to file my statement with the reporter, Mr. Chairman. That statement contains what I would like to say if time permitted. Then I will make a very brief statement.

Mr. DEMPSEY. We will be glad to have you do so, Governor.

(The statement submitted by Governor Crosby is as follows:)

STATEMENT OF ROBERT B. CROSBY, COUNSEL AND SECRETARY OF SALT-WAHOO WATERSHED ASSOCIATION, MAY 10, 1956

Honorable Members of Congress, this statement is submitted for the Salt-Wahoo Watershed Association. It is authorized by the officers and directors of that association. Directorships are allocated to each upland watershed in the basin so that all areas in the 1,600 square miles are represented. Salt-Wahoo Watershed Association, taking its name from the two principal streams, Salt Creek and Wahoo Creek, is a nonprofit, charitable corporation whose principal objective is to overcome the constant erosion and flood damage that has been wasting the resources of a fertile agricultural territory.

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This statement is prepared by the counsel and secretary for the Salt-Wahoo Watershed Association who was serving as Governor of Nebraska until January of last year. Many parts of this statement represent his personal knowledge of the desperate need for assistance that exists in the environs of Nebraska's State capital.

Throughout their entire length the valley floor lands along both Salt Creek and Wahoo Creek and their tributaries are subject to serious flooding. Most of the area is well improved agriculture land. Railroads, highways, and bridges which form the main arteries to the principal towns of the basin have repeatedly been submitted to severe damage by floods. Urban areas are also subject to flooding, including the municipalities of Lincoln (Nebraska's capital), Ashland, Hickman, Sprague, Roca, Saltillo, Valparaiso, Raymond, Memphis, Ithaca and Wahoo.

In Lincoln alone over 700 residences and more than 100 business and industrial establishments are subject to flooding by Salt Creek and its upper tributaries.

In the municipality of Ashland, near the mouth of Salt Creek, approximately 50 homes are subject to flooding.

There is a long history attached to the ravages of floods in this entire area—a history which has become increasingly critical during recent years. From 1900 to 1952 there were 136 floods in the Salt Creek Basin. 22 of these were major floods, 47 were so-called "moderate" and 67 were minor.

The most severe flood in the last half century occurred in 1908. It inundated all of the city of Lincoln within the flood plain to a depth of several feet and caused equally severe damage at Ashland. At that time no effort was undertaken to make an estimate of the monetary losses. However, since 1942 there is a record of flood damages totaling $5,474,500. It is obvious that prior to 1942 there were extensive damages for which systematic records are not available.

The flood of May 1950 caused $1,643,000 of damage in the city of Lincoln alone.

It has been reliably estimated that the average yearly flood damages in the entire basin amount to an annual dollar amount of $2,120,000 based on 1954 price levels.

The entire Salt-Creek drainage area includes all or parts of 6 counties, and as mentioned includes approximately 1,600 square miles.

One hundred year anniversaries are now being celebrated by 4 or 5 towns in Nebraska. It is roughly a century since the white man came to this area and began to turn the soil with his plows. The Indian bequeathed to the white man an average depth of topsoil of 12 inches or more. It is a startling fact that at the present time the average depth of topsoil is not over 4 inches. Unless immediate steps are taken beyond the ordinary soil conservation practices it is apparent that this entire fertile region will become a wasteland.

Because it is the capital of Nebraska some specific reference to the city of Lincoln may be permitted. Within Lincoln almost 90 city blocks are subject to flooding by Antelope Creek. Floods such as that of June, 1951, caused damage in excess of $470,000. Local people in Lincoln favor the early construction of a reservoir on Antelope Creek at the southeastern city limits. This reservoir will not only prevent flood damages but would also provide an ideal recreational area. In order to obtain the maximum flood control value from this reservoir it should be located as close to the developed urban area as possible. Very rapid residential development is occurring along the southern and eastern edges of Lincoln. Home construction is threatening to encroach upon the site of the reservoir. City authorities are in doubt as to whether to prevent such encroachment by a zoning ordinance because it is not known whether the reservoir will be authorized and constructed. If dwellings should be erected to any extent in this area the cost of acquisition of the reservoir site would be prohibitive, and much less satisfactory alternate methods of flood protection would have to be adopted.

Local interests recognize that if Lincoln city planning and improvements are to proceed in an orderly and efficient manner the early construction of the Antelope Creek Reservoir is imperative. A southeast diagonal highway is now under construction with its terminus in the vicinity of the proposed reservoir. The highway would follow the valley of Antelope Creek if extended. The school board has acquired a site for a new school which is being deferred pending authorization of this project and an exact location of the dam.

It certainly must be conceded that quick action is essential. If authorization or construction of the Antelope Creek Dam is delayed and if the present growth of Lincoln in that area continues, then either a less satisfactory reservoir site further upstream must be used or the more costly method of channel improvements

and enlargement must be resorted to. In the latter event the potential recreational developments will be altogether sacrificed.

The foregoing however probably places too much emphasis on the particular problems of Nebraska's capital city.

If the gradual destruction of the agricultural economy of this region is to be halted the entire comprehensive plan for the Salt Creek Basin must be accomplished.

The overall plan of improvement involves 2 coordinated programs, 1 under the supervision of the Corps of Engineers, the other under the supervision of the Department of Agriculture through the Soil Conservation Service.

Each program complements the other; there is no overlapping.

Therefore each program depends upon the other. If one program fails to be completed, then the other program will be only imperfectly effective.

The Corps of Engineers' program includes a system of 9 dams and reservoirs on tributaries above the city of Lincoln; the dam and reservoir on Antelope Creek near the Lincoln city limits that has already been discussed; 2 dams and reservoirs in the Sand Creek watershed, being a tributary of Wahoo Creek; channel improvements in the vicinity of Sprague, Hickman, and Roca; channel enlargement, levees, and bridge alterations through Lincoln and from Greenwood to the mouth of Salt Creek; channel improvement, straightening, and levees on Wahoo Creek from the vicinity of Weston to the mouth of Wahoo Creek and also on the lower portions of the major tributaries of Wahoo Creek.

The Corps of Engineers' plan will provide a high degree of flood protection for all areas where damageable values are sufficiently concentrated to warrant such protection, such as the cities of Lincoln and Ashland and the highly developed rural areas along the principal streams of the basin.

The Department of Agriculture's plan, under the provisions of the 1954 Watershed Protection and Flood Prevention Act sometimes referred to as the Hope-Aiken law or Public Law 566 will provide for soil-erosion prevention and flood retardation in the upland areas, together with a reduction in damages in rural areas along the smaller streams. Two pilot watershed projects are now in progress, one in the upper Salt Creek area where 8 floodwater retarding structures have been constructed, and the other in the Swedeburg area where 3 such structures have been completed. Several additional structures in both areas are to be constructed. The Department of Agriculture program when completed will provide a system of 165 small reservoirs. The law requires that land-treatment practices in the drainage areas above each reservoir shall be at least 75 percent complete before the reservoir is constructed.

Local interests firmly recognize that the Corps of Engineers' plan is not an independent plan. Rather it is an essential part of a cooperative plan. The Department of Agriculture program is going forward. It is expected that authorization will soon be completed for the construction of 21 floodwater retarding structures in the Oak Creek area under the Hope-Aiken law. It is absolutely essential for the success of the overall plan that the Corps of Engineers' program go forward along with the Department of Agriculture program.

In coordination with the Department of Agriculture program, the proposed improvements by the Army Corps of Engineers will provide a high degree of protection from recurring floods in both urban and rural areas. Through Lincoln the coordinated plan will be capable of providing protection against 50.3 percent of the standard project flood. Studies that have been made of the effect of the proposed improvements on two recent floods of record, the floods of 1950 and 1951, show that both of these would have passed down Salt Creek without overflow into the city of Lincoln. Had these improvements been in effect during these 2 floods, the benefits within the city of Lincoln alone would have exceeded $2½ million. Similarly in rural areas the degree of protection will be high.

The average yearly benefits provided by the improvements proposed by the Corps of Engineers will be as follows:

	December 1954 prices
Reduction of flood damages	$870,000
Increased land use	12,700
Bridge replacement	5,200
Fish and wildlife	47,900
Total	935,800

Turning to the overall cost of the corps' plan, based on December 1954 prices, will be as follows:

Federal cost	$460,000
Local, non-Federal cost	123,500
Total	583,500

The economic justification for the Corps of Engineers' project is apparent and ample. The yearly cost charges compared to the yearly project benefits result in a favorable benefit ratio of 1:1.60. Thus the project is clearly justified by a substantial margin.

It should be noted that local interests are preparing to contribute about $1,600,000. This will include a cash contribution from local interests of $82,000, which is equivalent to 4.3 percent of the Federal cost of construction of the channel improvements through Lincoln. This represents the benefits from increased land utilization. This is equivalent to 50 percent of that portion of the project cost allocable to this type of benefit. Of the annual maintenance costs of $78,000, based on December 1954 prices, $63,000 will be borne by local interests.

The partnership concept between Federal Government and local interests is splendidly exemplified by the degree to which local people are participating in the cost of this project. Local interests are aware of their responsibilities. They are ready to participate financially. The cities and villages, the counties, the chamber of commerce, the soil-conservation districts and business and farmer groups are all working together. The Salt-Wahoo Watershed Association has been formed as a point of focus for all of these interests.

The recreation possibilities must not be overlooked. The entire region has almost no desirable lakes. The creeks, situated as they are in flood-scarred channels, offer poor possibilities for recreation.

There will be permanent pools for fish and wildlife conservation in all of the proposed corps reservoirs except No. 16.

The corps has agreed that during the definite planning stages consideration will be given, in cooperation with the Nebraska Game, Forestation, and Parks Commission and interested local groups, to increase the reservation for permanent pools in those reservoirs where adequate capacity will be available. It is understood that local interests will agree to bear the cost of additional rights-of-way and fencing that will be required.

The recreation committee of the Salt-Wahoo Watershed Association has appeared before the Nebraska Game Commission and has received definite assurances that the commission will be ready and eager to participate in the cost of developing the appropriate reservoirs for recreation purposes. A joint survey was undertaken by the United States Park Service, the United States Fish and Wildlife Service, and the State game commission. All of the fieldwork has been completed. Submission of the final report has been delayed by the death of the executive secretary of the State game commission.

The statement of Raymond A. McConnell, Jr., cochairman of the Salt-Wahoo Watershed Association, has emphasized the long and arduous process which finally brought about coordination of the programs of the two Federal agencies, the Corps of Engineers and the Soil Conservation Service. It should be realized that the overlap between the original plans of the Corps of Engineers and the Soil Conservation Service was of minor extent in comparison with the overall scope of either of the two plans.

The plan of improvement originally proposed by the Corps of Engineers consisted of a system of 17 reservoirs together with a system of channel improvement and levees along the principal streams of the basin.

The program originally proposed by the Soil Conservation Service consisted of an accelerated program of land treatment in the upland areas of the basin together with a program for stabilization of small water courses by the construction of 165 small reservoirs.

The land-treatment program of the Soil Conservation Service, which represented 77 percent of the overall program in terms of cost, did not overlap with the plan of improvement proposed by the Corps of Engineers. Similarly, the system of channel improvement and levees included in the plan of the Corps of Engineers, which represented 65 percent of the cost of that plan, did not overlap with the program proposed by the Soil Conservation Service.

Therefore the overlap was limited to the system of 17 reservoirs proposed by the Corps of Engineers and the system of 165 small reservoirs proposed by the

Department of Agriculture. Even at this point the overlap of drainage areas to be controlled involved only 34 of the SCS reservoirs, and actual physical overlap involved only 11 of these. This overlap was further reduced due to changes made when the work plans for the pilot projects were completed in the upper Salt Creek and Swedeburg areas.

The final coordination of the 2 programs resulted in the deletion of 5 reservoirs from the Corps of Engineers' plans, which were the smallest of the reservoirs originally proposed, and the omission of 11 reservoirs from the Soil Conservation Service program for the upper Salt Creek pilot watershed.

Local interests have requested that the Corps of Engineers cooperate closely with them during the definite planning stages in the preparation of final plans for channel and levee improvements on Wahoo Creek and also in the final determination of exact sites for reservoirs, and it has been further requested that the authorization act be worded to permit adjustments in reservoir sites to be made, if desirable, where suitable alternate sites are available. The Corps of Engineers has acceeded to these requests.

It is respectfully submitted that this overall program, representing an almost unique partnership between the Corps of Engineers and the Department of Agriculture, and further representing a high degree of participation by local interests, furnishes a fine example to the rest of the Nation. It should receive every encouragement.

We urge that the project of the Army Corps of Engineers be included in the omnibus appropriation bill, and we further urge that a modest appropriation be made at this session to permit the initial engineering and the commencement of construction for the most urgently needed reservoirs, being the Antelope Creek Reservoir and two of the larger reservoirs above Lincoln that are essential to the protection of the lives and homes of a large group of citizens.

Governor CROSBY. Also, if it meets with your convenience we will pass to each member of the committee copies of the witness' statements as each witness appears.

Mr. DEMPSEY. That would be helpful.

Governor CROSBY. Now, Mr. Chairman, and gentlemen of the committee, this situation before I became Governor should have commanded my attention more than it did, at least. Since leaving the Governor's office, I have became a resident of the city of Lincoln. Prior to my governorship, I became aware of the fact that this area surrounding Lincoln, the capital city, faced a severe flood problem.

About a century ago, the white man settled this area and the Indians took their leave.

The Indians had taken pretty good care of the area.

The soil experts estimate that there was better than 12 inches of top soil in this area. It still is a fertile agricultural area, but in the last century with our plows, and our carelessness, I am sory to report that the average depth of the top soil has been reduced from something over 12 inches to something in the neighborhood of 4 inches.

In many areas the erosion has been very severe.

Our problem, and it is a problem which I am aware is not just peculiar to this area—I suppose it is repeated many times around the country—but our problem is of such proportions that if we do not check what is happening in this area around Nebraska's capital city, we face the extinction of agricultural production as we have known it.

From 1900 to 1952, there were 136 floods in the 1,600 square miles which you see on this map [indicating]. That is at about the rate of 2½ floods a year. Sometimes they were quite general in extent and sometimes they struck at particular points.

For instance, well over $1,500,000 damage was done in 1950 right in the city of Lincoln. We have 90 city blocks which are subject to

flooding from Antelope Creek, coming in from this direction [indicating on map].

The experts tell us that the average yearly flood damage in this area [indicating on map] indicates $2 million. Now, that is the amount of measurable flood damage for each year.

This problem has been considred, of course, for a good many years. I am going to make my own statement very brief. Some of the other witnesses will speak to you for a moment on how the work started from the beginning.

This involves, of course, in part, the problem of these tributaries, Antelope Creek to which Mr. Brown made reference, and Salt Creek, and these tributaries [indicating].

I was visiting recently with a banker from Hickman, Nebr., and this is a town which is flooded frequently. He was telling me that when he was a boy he used to go out in the country and sit on the edge of the cuts and step across the draws. Now, those draws have become gulches and the creeks have become silted up. So, the floods have become increasingly serious in this area and in this city.

Mr. DEMPSEY. When you speak of $2 million damage a year, what damage does that include?

Governor CROSBY. That includes all measurable damage as I understand it, damage to roads, bridges, railroads and fences.

Mr. DEMPSEY. Does that include the topsoil?

Governor CROSBY. No.

Mr. DEMPSEY. Just structural damage?

Governor CROSBY. As I understand it, it does not include what is probably the most significant damage of all, that is, the sloughing away of the topsoil. I do not know how one would measure that.

I am happy that the committee's attention has been drawn to this problem this morning.

In facing this problem, we realize that we need a coordinated plan and assistance from the Federal Government. We need desperately any help that the Soil Conservation Service and the Department of Agriculture can give us.

We are going to make the maximum use of Public Law 566's method of controlling flood conditions in these upper tributaries, and we also need the larger measure of protection which the Corps of Engineers can give.

So, after long and arduous negotiations with the Soil Conservation Service and with the Corps of Engineers, we have developed a coordinated approach to our problem. We have the two agencies working together. Of course, because we have obtained coordination, it is now essential that each agency go ahead somewhat in concert with the other.

With regard to plans to meet our problems, they must be completed on both sides, the Corps of Engineers' side and the Soil Conservation side.

We are proud of this coordination. We thing it is a fair approach to the solution of a problem which means a great deal not only to our locality and State, but to America, to many other parts of the Nation, to have Federal agencies working together to control these problems, each taking the part of the problem which they are best suited to cope with.

Of course, it goes without saying that we are extremely anxious to see this go ahead, the Corps of Engineers end of it which you are

considering today, and the Department of Agriculture part of it which Mr. Brown was being questioned on at some length.

With your permission, Mr. Chairman, I wish to file with the committee a statement from the Honorable Victor E. Anderson, the present Governor of Nebraska.

Mr. DEMPSEY. Without objection, it may be included in the record.

Governor CROSBY. Our Governor in very strong terms urges the committee to give attention to this project which is being presented today.

(The matter referred to is as follows:)

STATE OF NEBRASKA,
Lincoln, May 10, 1956.

Subject: Army Corps of Engineers project, Salt Creek, Nebr.

FLOOD CONTROL SUBCOMMITTEE,
Public Works Committee,
House of Representatives, Washington, D. C.

HONORABLE MEMBERS OF CONGRESS: As Governor of Nebraska I have an immediate interest in the 1,600 square miles that comprise the Salt Creek drainage area. All or parts of five counties are involved.

Most of this area is well-improved agricultural land. When white settlers first came to this country a century ago the average depth of the topsoil was in excess of 12 inches. Now the average depth of topsoil is less than five inches.

This entire area of our State has been damaged by frequent and devastating floods for over half a century. Urban areas that are subject to flood are Lincoln, Ashland, Hickman, Sprague, Roca, Saltillo, Valparaiso, Raymond, Memphis, Ithaca, and Wahoo. The railroads, highways, and bridges which form the main arteries to these principal towns of the basin are subject to severe damage by floods.

In our State's capital, the city of Lincoln, over 700 residences and more than 100 business and industrial establishments are subject to flooding by Salt Creek and its tributaries.

In the years from 1900 to 1952 there have been 22 major floods in the Salt Creek Basin, 47 moderate floods and 67 minor floods.

The total flood damages, averaged on an annual basis, have been estimated at $2,120,000 per year based on 1954 price levels.

The policies of the Eisenhower administration are exemplified in the manner in which Nebraska people have planned a solution to the above problem. The partnership concept between the Federal Government and local groups has been accomplished. Further, this is one of the few instances where the Soil Conservation Service, Department of Agriculture, and the Army Corps of Engineers have completely coordinated their planning.

Local contributions have been promised from farmers in the area, the city of Lincoln, the counties of Lancaster, Seward, and Butler, from the Sanitary District No. 1 and from affected soil-conservation districts.

In a wonderful display of cooperation the Corps of Engineers' project includes channel improvements and levees and 12 flood-retarding structures which will give protection to areas where concentrated damageable values warrant such protection, such as the cities of Lincoln and Ashland and highly developed rural areas along the principal streams of the basin. The Department of Agriculture, SCS, plan under the Hope-Aitken law, Public Law 566, will provide for flood retardation and soil erosion prevention in the upland areas and in the rural areas along the smaller streams.

The Army Corps of Engineers' project is amply justified from the economic point of view. The average annual benefits from the proposed improvements would amount to $935,800 per year. Comparing the annual charges to the annual benefits, there results a cost-to-benefit ratio of 1 : 1.60.

Immediate action is imperative. In our capital city, Lincoln, flooding by Antelope Creek caused damage in June 1951, in excess of $470,000. The city is expanding at the southeastern city limits where the reservoir should be located. A diagonal State highway in the vicinity of the proposed reservoir is now in process of construction. The construction of a school on a site already purchased is being held up pending definite information on the construction of this

reservoir. If planning and improvements are to proceed in an orderly and efficient manner in the capital city it is necessary that the Antelope Creek Reservoir and two other reservoirs above Lincoln be commenced in the very near future.

Further, the Army project should be developed along with the Soil Conservation Service program. Each of the projects is essential to the other, and the plans of both the Army and the Department of Agriculture should go forward as a combined program. Such cooperative undertakings by Federal agencies has been one of the prime objectives of our present national administration.

I respectfully urge the Congress to authorize the Corps of Engineers Salt Creek project and include it in the omnibus authorization bill, and I further urge that funds be appropriated in sufficient amount to permit the detailed planning and construction of Antelope Creek Reservoir and two other of the larger reservoirs that are essential to the protection of the capital of Nebraska and its environs.

Respectfully submitted,

VICTOR E. ANDERSON,
Governor of Nebraska.

Governor CROSBY. I would like also to present a statement from the Honorable Clark Jeary, mayor of the city of Lincoln, together with a resolution of the Lincoln City Council, expressing its willingness to contribute $82,000 in cash toward the Corps of Engineers' part of the program.

(The matter referred to is as follows:)

CITY OF LINCOLN, NEBR.,
OFFICE OF THE MAYOR,
May 9, 1956.

Subject: Army Corps of Engineers project, Salt Creek, Nebr.

FLOOD CONTROL SUBCOMMITTEE,
Public Works Committee,
House of Representatives, Washington, D. C.

HONORABLE MEMBERS OF CONGRESS: Repeated damage from floods has been a matter of great concern to the city of Lincoln.

The flood of May, 1950, caused $1,643,000 of damage in the city of Lincoln alone according to reliable estimates. In the Salt Creek Basin from 1900 to 1952 there were 136 floods.

Within the city of Lincoln almost 90 city blocks are subject to flooding by Antelope Creek. Floods such as that of June, 1951, are estimated to cause damage in excess of $470,000. Construction of a reservoir at the southeastern city limits of Lincoln would not only prevent such flood damages but would also provide an ideal recreational area. The city is now expanding in the area where the Antelope Creek Reservoir is proposed to be located. If city planning and necessary improvements are to proceed in an orderly manner it is important that this reservoir be constructed at an early date.

Quick action is essential from the point of view of the city of Lincoln. Some developments, including a new school for which a site has been purchased, are being deferred pending project authorization. A southeast diagonal highway in the vicinity of the proposed reservoir is now in progress. If the project is authorized and programed for early construction, then city officials will be justified in protecting the reservoir area from encroachment by taking zoning action and other steps to coordinate the reservoir with the comprehensive city plans.

If authorization or construction are delayed the present growth of the city in the area of the proposed reservoir may make its construction impossible. In that event a less satisfactory site further upstream would have to be used.

We consider the city of Lincoln to be the vulnerable point in the watershed. Considering the surrounding terrain in the 1600 square mile Salt Creek drainage area, Lincoln is at the bottom of a saucer so to speak.

As mayor of Lincoln I respectfully urge that the plan of the Corps of Engineers be authorized, and I further urge that funds be made available for the detailed planning and construction of Antelope Creek Reservoir and two of the larger reservoirs above Lincoln in order that assured protection for the city can be provided at the earliest possible date.

STATEMENT OF HON. OTTO H. LIEBERS, NEBRASKA STATE SENATOR, CHAIRMAN OF

Local interests are aware of their responsibilities. On the 7th day of February, 1955, the Council of the city of Lincoln adopted a resolution which is a part of the project plans submitted to this committee and which reads in part as follows:

"*Now, therefore, be it resolved by the mayor and City Council of Lincoln, Nebr.*, That it is the opinion of the said mayor and the said City Council that local interests favor and endorse the plan of improvement presented to them and that, should the plan be recommended by the Corps of Engineers and authorized by the Congress of the United States to be constructed, local interests, prior to the initiation of construction, will be willing and will be financially able to perform all of the requirements of local cooperation, including the furnishing of a cash contribution toward the construction of the project of approximately $82,000."

Respectfully submitted.

CLARK JEARY,
Mayor of the City of Lincoln, Nebr.

Governor CROSBY. I would also like to submit a statement from the present chancellor of our State university, Dean Clifford M. Hardin, who is one who specializes in agriculture, and who has been extremely interested in this project.

(The matter referred to is as follows:)

STATEMENT OF CLIFFORD M. HARDIN, CHANCELLOR OF THE UNIVERSITY OF NEBRASKA, AND DIRECTOR OF SALT-WAHOO WATERSHED ASSOCIATION, MAY 11, 1956

To the Honorable Members of the Flood Control Subcommittee of the Public Works Committee of the United States House of Representatives:

Since establishing my residence in Lincoln I have felt a keen interest in the efforts to conserve the natural resources of the area drained by Salt and Wahoo Creeks. Much of my own study and research has been in the field of agriculture. The deterioration of this region during the last century because of floods, and erosion is apparent to any trained observer.

I am advised that the average depth of the topsoil was about 12 inches when this region was first settled. Now the Soil Conservation Service estimates that the average depth of the topsoil is in the neighborhood of 4 or 5 inches, and in many places the erosion of the topsoil has been complete.

Throughout this region the tributaries, gullies, and channels are countless. Frequent floods have aggravated the natural course of erosion.

Studies have indicated that during the last half century floods have occurred at the rate of more than two and one-half per year on the average. Many of these floods were very severe, causing loss of life and millions of dollars of damage. The average annual flood damages in the entire basin have been estimated in excess of $2 million, based on 1954 price levels.

Industrial development in the vicinity of Lincoln has been retarded because the suitable locations for such development are threatened with flood conditions.

It is apparent that the entire community of these watersheds must take immediate and substantial steps toward conquering the problem.

The planning of the Federal agencies, involving a cooperative effort by the Army Corps of Engineers and the Department of Agriculture, is to be highly commended. This planning has been supported by remarkable cooperation among all of the diverse local interests: The six counties that will be effected, the soil conservation districts, the cities and villages, and the farm people and businessmen.

The Corps of Engineers' project which is now submitted to your honorable committee is a coordinate part of the comprehensive plan for halting the annual flood damages. I strongly urge that the project be approved and included in the omnibus appropriation bill.

Governor CROSBY. I would also like to submit a statement from the record from State Senator Otto H. Liebers, chairman of the Governor's advisory commitee on watershed protection under Public Law 566, the soil conservation program.

(The matter referred to is as follows:)

STATEMENT OF HON. OTTO H. LIEBERS, NEBRASKA STATE SENATOR, CHAIRMAN OF THE GOVERNOR'S ADVISORY COMMITTEE FOR WATERSHED DEVELOPMENT AND A COCHAIRMAN OF THE SALT-WAHOO WATERSHED ASSOCIATION

To the Honorable Members of the Flood Control Subcommittee, Public Works Committee, United States House of Representatives:

Since its establishment in 1954 the undersigned has served as chairman of the Governor's advisory committee for watershed development. Approximately 14 applications have been made to our committee for planning assistance from the Department of Agriculture under the provisions of the 1954 Watershed Protection and Flood Prevention Act. This overall view of the watershed problems of Nebraska permits me to say that one of the most critical situations exists in the Salt-Wahoo Basin.

The Governor's advisory committee has approved the Department of Agriculture program for 21 small flood control structures in the Oak-Middle Creek area. My committee understands that when it is feasible additional programs will be developed under the Department of Agriculture's program.

However, the project being presented to this committee by the Army Corps of Engineers is absolutely essential to the comprehensive overall plan for the Salt-Wahoo Basin. The dimensions of the flood problem in this area require the 12 reservoirs and the channel improvements proposed by the corps. Without these reservoirs and channel improvements the region cannot be secure against the vicious damages resulting from recurring floods and the erosion that accompanies them.

As cochairman of the Salt-Wahoo Watershed Association I subscribe to and endorse the statement that has been filed with this committee by that association.

I am familiar with some of the other statements being filed with this committee and I shall not burden you with a repetition of the factual information contained in them.

However, I can express two points of view that may be useful to the committee. First, as a member of Nebraska's unicameral legislature, I have accepted the leadership in causing legislation to be enacted which would permit local people to cooperate with the Soil Conservation Service under the provisions of the Hope-Aiken Laws, as the 1954 Watershed Protection and Flood Prevention Act is popularly called in our State. Often I have presented to the members of the Nebraska Legislature the peculiar problems of the Salt-Wahoo Basin. I think I am correct in saying that the project offered to this committee by the Corps of Engineers would have the endorsement of the members of the legislature if they had an opportunity to express themselves to this committee.

Further, as chairman of the Governor's advisory committee, I feel that I express what would be the sentiments of the members of that committee when I urge that the corps' project be included in the omnibus authorization bill.

Permit me to speak as a private citizen. For many years I have been engaged in the dairy business in the vicinity of Lincoln. I am intimately acquainted with the problems of farmers in the entire region. My legislative district is largely comprised of farms. I have watched the damages that have been inflicted year after year by floods: the loss of human lives, the loss of livestock and other personal property, the tragic loss of precious topsoil. I know that our area cannot maintain itself as a prosperous unit of the national economy without the protection that will be afforded by the project that is being offered by the Corps of Engineers.

May I emphasize to this committee that the local people will share in the cost of this project to the limit of their ability. It is contemplated that local interests will provide without cost to the Federal Government all lands, easements, and rights of way required for the channel improvement and levee features, and also all of the fencing and special costs related to recreational developments in the reservoirs. Local interests will hold and save the United States free from damages due to the construction works. Our local people will maintain and operate all of the channel improvement and levee works and the permanent pools for fish and wildlife conservation in the reservoirs after their completion in accordance with regulations prescribed by the Secretary of the Army. At the local level we will take the necessary steps to insure that acquired lands adjacent to the permanent pools will be protected against use by livestock and that such lands will be open to public use with public access thereto provided. We have furnished adequate evidence of our willingness and ability to give the required local cooperation, including a cash contribution toward the cost of the project.

I feel that our need for this assistance has been amply demonstrated, and that our spirit of cooperation justifies us in urging you to include the Corps of Engineers' project in the omnibus authorization bill.

Governor CROSBY. I would like to submit also a statement from Mr. Earl T. Luff, president of the Lincoln Steel Works and vice president of the Lincoln Chamber of Commerce flood control committee.

His manufacturing establishment lies in the only area around Lincoln which is now available for industrial development to try to balance our economy a little bit. He is subject to flooding and the whole area now remaining for industrial development in the Lincoln environs is subject to flooding.

(The matter referred to is as follows:)

LINCOLN STEEL WORKS,
Lincoln, Nebr., May 10, 1956.

CHAIRMAN, HOUSE PUBLIC WORKS COMMITTEE,
Washington, D. C.

DEAR MR. CHAIRMAN: Due to circumstances entirely beyond my control it is impossible for me to appear before your committee. I would therefore like to use this means of urging your favorable consideration of the United States Army flood control program for the Salt-Wahoo Valley.

Our plant was built in the Salt Creek Valley in 1937 and since that time we have experienced three major floods which have completely inundated our plant and offices causing great damage. There are many other industries as well as residences, railroad and highway facilities located in this same general area. These too have suffered great damage on each occasion. Many of us have taken steps to protect our property as best we can, but our efforts must necessarily be limited in scope and size.

Official records dating back to 1861 indicate that a major flood in the Salt Creek Valley can be expected once in every 7-year period. As our city grows and our industries expand the damage resulting from these floods becomes greater and greater. Our local people have wrestled with the problem over a long period of time and have studied many plans. We are convinced that the United States Army plan now before your committee is the only feasible solution. We sincerely hope it will be favorably acted upon by your committee.

Thank you.

EARL T. LUFF,
Past President, Lincoln Chamber of Commerce, Vice Chairman, Lincoln Chamber of Commerce, Flood Control Committee, Chairman, Salt-Wahoo Watershed Association, Flood Prevention Committee.

Governor CROSBY. I am now serving as counsel and secretary of the Salt-Wahoo Watershed Association.

This association was formed specifically to try to advance a solution of this problem and that is its whole purpose.

I have been somewhat amazed as a man who has campaigned a little and who knows sometimes about the antagonisms that exist between rural areas, city areas, and so forth, to note that in our area we have produced complete unity. We have not only the backing of the city of Lincoln but of the many little towns in the neighborhood, Wahoo, Sprague, Hickman, and so forth, and also the farmers.

We have complete unity in respect to this problem and that unity is expressed through the Salt-Wahoo Watershed Association.

I will be glad to answer any questions the committee may have.

Mr. DEMPSEY. Are there any questions?

Thank you very much, Governor.

Mr. WEAVER. The Lincoln Journal of Lincoln, Nebr., has always taken a genuine interest in flood control matters, not only for Lincoln but for surrounding areas of Nebraska. We are very fortunate in

having with us today, Mr. Raymond A. McConnell, Jr., editor of the Lincoln Journal and cochairman of the Salt-Wahoo Watershed Association.

Mr. McConnell is also the author of many articles on small watershed development and protection and is nationally known in this field.

Mr. McConnell.

STATEMENT OF RAYMOND A. McCONNELL, JR., EDITOR, LINCOLN JOURNAL, LINCOLN, NEBR.

Mr. SMITH. Mr. Chairman, for the benefit of the members of the committee who have not followed this work in previous sessions, Mr. McConnell is chairman of a national organization in this regard and has been one of the outstanding national leaders in the whole watershed project field. He has not only worked to improve the small watersheds of the country but he is also the author of many articles on small watershed development and protection.

Mr. DEMPSEY. We are very glad to have you with us, Mr. McConnell.

Mr. MCCONNELL. Thank you very much, Mr. Chairman.

Mr. DEMPSEY. You may read your statement if you desire.

Mr. MCCONNELL. I have a prepared statement, sir; but rather than read it, I would just like to ask that it be incorporated in the record.

Mr. DEMPSEY. Without objection, it will be accepted for the record.

(The matter referred to is as follows:)

STATEMENT BY RAYMOND A. MCCONNELL, JR., EDITOR, THE LINCOLN JOURNAL, LINCOLN, NEBR., COCHAIRMAN, SALT-WAHOO WATERSHED ASSOCIATION, INC., LINCOLN, NEBR.

In submitting this statement I intend to express several points of view: That of a long time resident of the city of Lincoln, that of a farm owner who now lives on his farm, that of the editor of a city daily newspaper, the Lincoln Evening Journal, the point of view of the cochairman of the Salt-Wahoo Watershed Association. In the latter connection the statement of the Salt-Wahoo Watershed Association as filed with this committee has my full approval.

I wish to supply emphasis to several aspects of the Corps of Engineers project for the Salt-Wahoo watershed based on my close personal association with the project from the beginning. Evidence of the tragic damage that has been suffered by the entire basin since the turn of the century is amply supplied by other statements describing the frequent flood conditions.

The project presented to Congress today is the fruit of a monumental effort at cooperation: Cooperation among local rural and urban residents and agencies of government, and cooperation between the Army engineers and the Department of Agriculture.

Beginning in 1944 intermittent studies had been made by the Corps of Engineers but it was not until early in 1948 that adequate funds were available to permit an active and continuous study of the Salt Creek Basin.

In July 1950, investigation of the Salt Creek Basin by the Soil Conservation Service was authorized.

Subsequently the studies by each agency proceeded for several years independently of each other.

In the meantime farmers and city people in the basin were sharply aware of the severe losses they had suffered and were continuing to suffer by reason of floods. The average flood damage each year in the basin had been estimated at $2,120,00 based on 1954 price levels.

In May 1950, $1⅔ million of damage was inflicted upon the city of Lincoln alone. In June of the following year another flood caused damage within the city amounting to almost a half million dollars. Throughout the basin the damages from these two floods in successive years were many times the amount of damage suffered by Lincoln. Lives were lost. Many homes were destroyed.

Thus among the local people there was a feeling of urgency approaching desperation.

Late in 1950 there were efforts to effect coordination between the tentative program of the Soil Conservation Service and a tentative plan of improvement for flood control developed by the Corps of Engineers. Early in 1951 it was decided to undertake cooperative studies of the basin.

In October 1952, coordination between the two agencies not having been achieved, the Salt-Wahoo Watershed Association arranged a series of discussions in an effort to develop a comprehensive plan for the entire Salt Creek Basin which both agencies could recommend and support without reservation. As a result of these discussions the Watershed Association expressed its partial approval, with certain limitations and exceptions, of the plan proposed by the Corps of Engineers, and also expressed its partial approval of the Soil Conservation Service's proposed program with modifications to eliminate certain structures.

Finally, under constant urging from local interests, in December of 1953 the Chief of Engineers initiated discussions with the Department of Agriculture at the secretarial level aimed at achieving coordination of the two plans of improvement prior to the submission of the corps' report. In 1954 these discussions were continued at the field level and many local interests took an active part including the Salt-Wahoo Watershed Association, the chamber of commerce, and a joint committee representing all of the soil-conservation districts in the Salt Creek Basin.

At long last coordination was achieved in November of 1954. There had been an overlapping of certain aspects of the Corps of Engineers' plan and the Soil Conservation Service plan. At a conference on November 10, 1954, it was agreed that 5 reservoirs would be deleted from the Corps of Engineers' plan and that 11 reservoirs would be removed from the Soil Conservation Service plan for upper Salt Creek watershed.

The coordinated plans were approved formally by each of the participating local groups and by the Governor of Nebraska.

At the 1954 National Watershed Congress the cooperation thus achieved between the Corps of Engineers and the Department of Agriculture was described by Secretary McKay of the Department of Interior as being precisely the kind of coordination that this administration aims to achieve.

Throughout this long period of negotiations there has been a remarkable unity of purpose among all local interests—1,600 square miles, including all or parts of 5 counties, comprise the Salt Creek Basin. Farmers from all parts of the area have contributed time and effort toward the development of the overall plan. The capital city of Nebraska, Lincoln, has cooperated with the villages in the area, including Ashland, Hickman, Sprague, Roca, Saltillo, Valparaiso, Raymond, Memphis, Ithaca, and Wahoo. Townspeople and farm people have sat down together and worked out their problems.

We submit that this monumental effort at cooperation among diverse interests and all levels of government stands as an example to the entire country and should receive every encouragement from the Congress.

It should be noted that concurrent development of the two Federal programs, that of the corps and that of SCS, is essential to the success of the comprehensive plan. During the last 2 years pilot projects, consisting of flood control structures in the Swedeburg area and in the upper Salt Creek area, have been carried forward by the Department of Agriculture and 11 such structures have been completed. We are hopeful the Soil Conservation Service project for the Oak-Middle Creek area will receive authorization at this session of Congress under the provisions of the 1954 Watershed Protection and Flood Prevention Act. It will be a shocking disappointment if the corps' project cannot be commenced this summer by inclusion in the omnibus authorization bill and by a modest appropriation to permit the engineering and construction of at least three of the corps' dams which are most urgently needed as a part of the overall plan.

In connection with the Antelope Creek Reservoir proposed by the corps, I wish to join the Governor of Nebraska in his statement to this committee that "immediate action is imperative." Almost 90 city blocks in Lincoln are under the constant threat of loss of life and devastating damage from another flood of Antelope Creek. City planning is being delayed, construction of a school on a site already purchased is awaiting the action of this Congress, completion of a southeast diagonal highway depends upon the definite authorization of this reservoir. Zoning programs are being held in abeyance. Further, the other larger reservoirs above Lincoln are necessary to the protection of Nebraska's capital city and also for the protection of the reaches below the city all the way to the city of Ashland.

Although it is of secondary importance. I have noted that some of the statements submitted to this committee have overlooked the recreational development that will accompany the construction of the Army reservoirs. This entire Salt Creek Basin has been singularly lacking in areas that lend themselves to recreation. Although the plow and the ravages of cloudbursts have criss-crossed the countryside with creeks and gullies, there have been no lakes. Eleven of the Army reservoirs will have permanent pools for fish and wild life conservation. The State Game, Forestation Parks Commission of Nebraska has pledged its cooperation in the development of recreation areas, the acquisition of the necessary additional land around the most suitable reservoirs and the financial support of the entire recreation plan. This will be a significant, long-term benefit to the residents of the area.

I respectfully urge this committee to include the Salt Creek project in the omnibus appropriation bill, and I express the hope that this same Congress will make a modest appropriation so that the coordination between the two Federal agencies that has been achieved on paper can be carried into practice.

Mr. McCONNELL. I would like to merely hit what I think are the high spots in the testimony, without duplicating what the other agencies have presented in their voluminous reports, and what the other witnesses will say.

We do feel that we have in this project, as the Army thinks of our total project, something which merits your very careful attention, because we feel it is, if not altogether unique in all respects, at least unusual in a number of respects which I shall mention.

In the first place, we have a project which we feel stands on its own bottom, or stands on its own feet, because we have attempted to achieve a balance of objectives for the area as a whole, an urban area which is very highly dependent upon its agricultural environment.

Our program, as you have seen, contemplates, as nearly as possible, the complete treatment of the land of the area as what you might call the foundation or starting point, beginning at the very topmost reaches of this saucer and following on all the way down from there.

It may interest you to know that when we undertook to develop this program 7 or 8 years ago, there was something less than 4 percent of the agricultural land of the watershed on which the desirable land measures had been installed. Today, I do not have the exact statistics, but it is somewhere around in excess of 30 percent, which is a very considerable evidence of voluntary participation by the present landowners in the area and, of course, as you are aware, an integral part and, in fact, a premise of both the pilot watershed program and Public Law 566, which developed from it, is that where there are these floodwater-retarding structures, there must be 75 percent or more of the land above the structure under land treatment. So we have 30 percent of this 1,600 square miles under land treatment.

We have in those areas where structures are going to be installed, 75 percent or more in the very most crucial parts of the area, and so we feel that our project is on its own feet and is sound and represents the very utmost in economy of resources and in the economy of public funds, for the simple reason that it does begin at the beginning and dams deal with those problems at every point where it arises rather than at isolated points and isolated segments of it.

It is because our objective is comprehensive and, we feel, altogether sound, that certain other unique aspects of this project have been possible. I think you will probably agree that it is very seldom that any project for controlling water can be proposed for an area of this size, which is nearly twice the size of the State of Rhode Island, with-

out prolonged and bitter controversies, and sometimes controversies that bubble over into very prolonged controversies.

We have as nearly a complete cooperation of local endeavor as I think you will find anywhere in the United States. Our Salt-Wahoo Watershed Association itself reflects that.

We have on our board of directors all the principal farm leaders of the area. We have community leaders in all of the upstream reaches, and we have community leaders in the downstream areas and also in the city of Lincoln, and also the community leaders in the villages and towns down at the bottom of the drain.

I submit it is very rarely that Congress will find a project where that true statement can be made.

We have this same story of cooperation stemming from the comprehensive nature of our objectives reflected in the cooperative efforts of the local subdivisions of government, which are endorsing and, in many cases, actively participating in one or more phases of this project.

I should mention that the University of Nebraska, whose chancellor is a director of our association, has donated educational materials to this type of program which have been widely used in the area and, for that matter, are in demand throughout the country.

The area there embraces 6 counties, or parts of 6 counties, 5 counties and a little into the sixth, and the county boards of supervisors are participating in the program. In some instances, they are doing that by guaranteeing maintenance of these agricultural structures and, in the case of the project before your committee, the four counties which are most directly affected are putting up cash. Under 566, the four counties are putting up cash contributions.

We have a local sanitary district which handles the sewer problems and the drainage problems in the vicinity of Lincoln. It is putting up cash for one phase of this project.

As Governor Crosby mentioned, there are six soil conservation districts in the area, all of which are actively participating, and the private landowners who are doing this land treatment are doing it, of course, for their immediate personal benefit, but as those of you who live on land know, there are landowners who think only of their immediate benefit and do not look ahead to the generations that will come, nor do they always look at the overall benefit involved. So, what a farmer does on his individual land in this case, affects the long-range survival of our community, and the very lifeblood of our cities, so that it is a private thing, and it is also a public thing too.

Just as we have indicated a spirit of cooperation in our area among all of the private interests involved and all of the local agencies of government, so I think it is true that we have a very unusual and interesting example here of coordination and cooperation between the Army engineers and the Soil Conservation Service.

These plans cannot be considered altogether separately.

Outside the Soil Conservation Service phase of our overall project up here in the upper end and in this part here [indicating] the need is primarily for agricultural benefits and for the benefit of areas above the reach of the Army structures under your consideration, and yet the Army project takes into account flood prevention benefits which accrue downstream from these upstream works of protection. We are not ashamed, in fact we are proud to stand here and ask for Federal participation in a project which through reducing efforts of the local

people and the cooperation of the Federal agencies, is a lot less expensive than it would be if this coordination did not take place, and it is accomplishing a totality of objectives instead of being a resource management job piecemeal.

Thank you, sir.

Mr. DEMPSEY. Thank you very much, sir.

Mr. WEAVER. Mr. Chairman, at this time I would like to present to the committee a man from Lincoln, Nebr., who is president of the National Bank of Commerce of Lincoln, a man who, I can assure you, knows what he is talking about, a man who started at the bottom and worked his way to the top. He is as public spirited as any citizen anywhere in the country, Mr. Byron Dunn of Lincoln, Nebr., director of the Salt-Wahoo Watershed Association.

Mr. DUNN. Mr. Chairman, I would like to expedite this by filing the statement that I was going to read.

Mr. DEMPSEY. Your statement will be included in the record.

(The matter referred to is as follows:)

STATEMENT OF BYRON DUNN, PRESIDENT OF THE NATIONAL BANK OF COMMERCE OF LINCOLN, NEBR., AND DIRECTOR OF THE SALT-WAHOO WATERSHED ASSOCIATION

To the Honorable Members of the Flood Control Subcommittee, Public Works Committee, United States House of Representatives:

As director of Salt-Wahoo Watershed Association and as one who has been active in its affairs from its beginning, I endorse the statement that has been filed in behalf of that association with this committee.

As the head of one of the principal banking institutions in southeastern Nebraska and as one who has closely observed the economic developments of the Salt-Wahoo area for close to half a century, I wish to make some special observations about the project that is presented by the Army Corps of Engineers.

The economic health of the 1,600 square miles in the Salt and Wahoo drainage basins depends largely on successful farming and industrial development. We have no mineral or ore deposits which can be mined; no oil fields have been discovered; we are inland without river transportation facilities. Therefore we are based upon agriculture and hope to balance our dependence upon agriculture by the development of appropriate industrial businesses.

With regard to agriculture, I have observed during the last two decades a decline in the productive capacity of our region. This can be traced directly to the ravages of erosion that has been aggravated by frequent floods. We are making great efforts to introduce proper land treatment practices, including contour planting, terracing, grassing of waterways, etc. We have been among the first to seek to qualify under the provisions of the 1954 Watershed Protection and Flood Prevention Act. Already pilot projects are well toward completion in the upper Salt and Swedeburg localities where upward of 11 small flood-retarding structures have been completed. The Oak-Middle Creek plan is being submitted to the appropriate committees of Congress involving 21 small structures. We welcome the fact that it is required that the land above each structure be 75 percent complete with regard to land treatment practices before the structure can be built.

We realize, however, that control of our main streams cannot be accomplished without the 12 reservoirs and the channel improvements covered by the Corps of Engineers project. These are absolutely essential to the success of the comprehensive plan of flood control that has been developed for the entire region. Without the corps' program our farmers cannot be secure against frequent flooding out of their crops, loss of livestock, damage to improvements and loss of life.

Accompanying the protection required by our farmers is the additional need for protection to our only industrial sites. It has been attested by many industrialists that Nebraska offers fine opportunities for the location of industries. We have an exceptionally good quality of labor. We offer a generous supply of electric energy and a good social environment.

However the only appropriate sites for industrial development in the vicinity of the city of Lincoln are sites which suffer the threat of serious flood damage.

We feel that we have lost many opportunities for the establishment of industrial enterprises because of the flood threat. Only by the construction of the principal Corps of Engineers reservoirs on the water courses above Lincoln can we be protected against future floods. Within the city of Lincoln over 700 residences and more than 100 business and industrial establishments are subject to flooding by Salt Creek and its tributaries.

It is not too much to say that a great deal of the future development of Lincoln is being held in abeyance until it can be known whether adequate flood control measures will be authorized and carried forward to completion.

I respectfully urge this committee to recommend the inclusion of the Corps of Engineers' project in the omnibus appropriation bill.

Mr. DUNN. I have been very much interested in this project for long years and I enjoy seeing Ray McConnell and the rest of the boys get the job done. All I do is bring them down here and see that they work. That is the big job of a bank president.

Of course, I was a farm boy down in this territory. I have lived in Nebraska many years. We had hills down there at one time. The floods have washed them all off now, and they have washed the soil down to New Orleans. We cannot bring it back in a bag.

There is one comment that I would like to make in the form of a statement.

Some people consider this an appropriation and the work being done as an expense. To me it is not an expense but it is an investment, and not too long a time an investment because it will increase income and the value of this property for tax purposes and the money will be returned to the Federal Treasury in the form of taxes very rapidly. People who have already fixed their lands over and invested 30, 40 or 75 prcent in our pilot lands over and invested the advantages gained during these years.

While we are talking about floods right now, we are praying for rain out there.

Thank you, Mr. Chairman, and gentlemen of the committee.

Mr. DEMPSEY. Thank you, Mr. Dunn.

Mr. WEAVER. Mr. Chairman, now I would like to present Mr. Archie J. Bailey, manager of the Lincoln Chamber of Commerce, in order that their viewpoint may be brought to your attention.

Mr. DEMPSEY. The committee will be glad to hear you, Mr. Baley.

STATEMENT OF ARCHIE J. BALEY, MANAGER, LINCOLN CHAMBER OF COMMERCE

Mr. BALEY. Thank you, Congressman. With your leave, I would like to file a statement of the president of the Lincoln Chamber of Commerce and then make a very brief statement, if I may.

Mr. DEMPSEY. Yes.

(The matter referred to is as follows:)

STATEMENT OF LINCOLN CHAMBER OF COMMERCE RE SALT-WAHOO WATERSHED PROJECT

We are privileged to support other agencies in their request for consideration by the Appropriation Committees of the House and Senate for funds in behalf of the Salt-Wahoo flood control project. This project is the culmination of efforts which began as early as 1891, when in that year, the citizens of Lincoln set up a sanitary district. That district through funds raised by a special levy has continuously sought to control the floods of Salt Creek and Antelope

Creek both of which run through the city of Lincoln. These streams, generally small and harmless, have in the past, become raging torrential rivers of nearly a mile wide rushing through the city and resulting in widespread damage. This occurred particularly in the years 1908, 1942, 1947, 1950, and 1951.

Lincoln is served by the Burlington, the Union-Pacific, and Northwestern Railroads which have their tracks along the banks of the Salt Creek. The Rock Island Railroad serves the city and runs its lines along Antelope Valley. All of these roads going through the city as a gateway, serve a large area covering much of the State. Along these streams through our city are some of the principal industrial plants, a large residential area, and many fine business properties. During the flood periods, we have seen hundreds of our citizens driven from their homes, tremendous losses to industry and business property and paralysis of train service not only to our city but to large parts of the rest of the State.

Likewise, we have observed the tremendous destruction to farm land—in particular, along the valleys of the Salt Creek. The people living along the stream and in the city are in constant danger of the threat of these floods. Downstream from Lincoln, the city of Ashland also suffers from a combination of the flooding of Salt Creek, Antelope, and Oak Creeks.

Both the Army engineers and the Soil Conservation Service have been deeply concerned with the problem which confronts this area. It has been a source of great satisfaction to the chamber of commerce and the citizens of Lincoln to see these two large agencies work hand-in-hand with a single purpose of harnessing the damaging floods of these creeks. It has been apparent to all that the smaller soil conservation dams, while helpful, would not in themselves fully give the protection needed. The larger dams built by Army engineers will give the added protection which this area has so badly needed for so long a time.

Many of the large dams can also be used for recreational purposes. Additional cost for making these dams available for recreation will be paid entirely from State funds raised by the Game Forestation and Parks Commission of the State of Nebraska. This recreation is badly needed in this area especially since a large number of troops are now stationed at the Lincoln airbase.

Our representatives in Congress are fully aware of our needs. Congressman Phil Weaver of the First District, Nebraska, is familiar with the needs of this area for flood protection and of the efforts of the Corps of Engineers and the Soil Conservation Service in working out the coordinated plan, a part of which is presented to this committee now. In his efforts, he has also been joined by Congressman Robert Harrison and Senators Roman Hruska and Carl Curtis who are also familiar with the needs of the district and have on various occasions urged the adoption of this program for the control of these flood waters.

We wish to thank the committee for their favorable consideration in support of this program for flood control which is so urgently needed to protect the lives and property of our community.

Respectfully submitted.

Attest:

ALBERT A. HELD, *President.*
ARCHIE J. BALEY, *Secretary.*
IRA D. BEYNON, *Chairman.*

Mr. BALEY. I would also like to submit this statement for the record.

Mr. DEMPSEY. It may be included in the record.

(The matter referred to is as follows:)

STATEMENT OF LINCOLN CHAMBER OF COMMERCE, LINCOLN, NEBR., REGARDING SALT-WAHOO WATERSHED PROJECT (NEBRASKA), INCLUDED IN THE 1956 RIVERS AND HARBORS OMNIBUS BILL, CORPS OF ENGINEERS

This statement supplements the more comprehensive presentation by Chairman Ira D. Beynon of the Lincoln Chamber of Commerce committee on flood control. It presents some additional information.

We in Lincoln have learned the hard way that we have a major problem in trying to control Salt Creek and its tributaries. Our best efforts, as private citizens, have been inadequate, although we have spent much money and effort in the doing. The records show floods of major or serious proportions in the years 1861, 1881, 1885, 1900, 1902, 1908, 1909, 1910, 1914, 1923, 1942, 1947, 1950,

and 1951. Small wonder, then, that we finally turned to the greater resources of the Federal Government to help achieve a solution:

Because of the large drainage areas to be controlled, and the tremendous amounts of water to be handled, we feel sure your honorable committee can appreciate the necessity for a high degree of major flood control.

A reduction in the smaller floods will help, but what we need is assured protection against the disaster-type floods. For that reason, it is imperative to have constructed the dams proposed by the Corps of Engineers for Salt Creek and its tributaries (Antelope, etc.), provided for in the omnibus bill now being considered.

We understand that each of these engineers' dams would store a minimum of 5.5 inches of runoff, that all but 3 dams would store 7.0 inches or more—and that 1 would be capable of storing as much as 17 inches of runoff. We are told that they also would be structurally safe, even if the worst possible storm—maximum probable flood—were to occur.

Such construction is especially necessary at a site such as No. 17, on Antelope Creek, which is immediately above an urban area. (Mr. Beynon's statement enlarges on this situation.)

Our 1950 flood took nine lives. This must not happen again.

The numerous bridges in Lincoln limit the amount of work which can be done without drastic alteration to bridges, railroads, and highways. It was necessary for the engineers and SCS to use a combination of flood control methods. The channel would be enlarged to the maximum allowed by the restrictions, and reservoirs would be used to reduce the flood flows to the capacity of the improved channels. Adequate protection cannot be provided without the Army engineers' reservoirs—nor can it be provided by the reservoirs alone.

Mr. Beynon mentioned recreational pools, created by State funds at most of the engineers' dams. We believe we should take advantage of every opportunity, not only to control damaging floods for the man who lives in the flood plain, but also to utilize our available water resources for the benefit of everyone.

We can truly say this is "the people's plan." In this basin we had, in effect, a choice between two plans, one developed by the Soil Conservation Service and the other by the Corps of Army Engineers. Now we have one, coordinated plan, meeting the objectives of the entire Salt-Wahoo Watershed Basin.

It represents the views of city people, farm residents and businessmen who united, and when it was necessary, made some concessions to achieve a common goal. The coordinated plan includes the features local people want and also fully meets the technical requirements of the Army engineers. It provides a rare example of an interagency partnership, not only in cost sharing but also in planning—an example which other agencies well could emulate.

Respectfully submitted.

ALBERT A. HELD, *President.*

Attest:

ARCHIE J. BALEY,
Secretary and General Manager.

Mr. BALEY. May I, for the record, ask that the population of urban Lincoln be noted as 125,000, and with the permission of Mr. Brennan add 35,000 additional as the adjacent or outlying population, making a total population of 160,000 for whatever value that is in your considerations.

Now, I will not touch on the agricultural phases of this project because that has been fully explored.

I would only ask that you consider how tragic it would be if the Army Corps portion of this plan did not proceed now to keep pace with the Soil Conservation Service which has already started, and which has passed appropriations. How tragic it would be not to have in operation one of the very first operating projects which is the Salt Creek and tributaries project, and on which these coordinated plans are being built. This is one of the finest things that has ever come up in Government.

As Mr. McConnell stated over the long pull in many cases, we feel that without the Army Engineers dam we will not have full protection.

Mr. Brown of the Soil Conservation Service told you that quite clearly.

We have a situation which has shown the possibility of a tremendous amount of water falling in a very limited area on one of these tributaries creating a flood without being stored up all over the watershed where it could have been done or held with some additional Soil Conservation Service dams.

So, in our opinion, it is quite essential, it is vital to us in this whole area, that you consider moving forward on this portion of the old plan and this corps plan now before you.

Thank you very much.

Mr. DEMPSEY. Thank you, Mr. Baley.

Mr. WEAVER. Now, Mr. Chairman and gentlemen of the committee, I would like to present to you a typical Nebraska banker in a rural area, Mr. Ray Judah, of Hickman, Nebr.

Mr. DEMPSEY. We will be very glad to hear you, Mr. Judah.

STATEMENT OF RAY JUDAH, BANKER, HICKMAN, NEBR., AND DIRECTOR OF SALT-WAHOO WATERSHED ASSOCIATION

Mr. JUDAH. I would like to file this statement, with your permission, Mr. Chairman.

Mr. DEMPSEY. Yes, it will be included in the record.

(The matter referred to is as follows:)

STATEMENT OF RAY JUDAH, BANKER, HICKMAN, NEBR., AND DIRECTOR OF SALT-WAHOO WATERSHED ASSOCIATION

To the Flood Control Subcommittee of the Public Works Committee, House of Representatives:

Born on the outskirts of the village of Hickman, except for a period of military service I have spent my entire life in this country. I operate the bank at Hickman and I manage eight farms in the area.

Hickman is located at the point of convergence of three branches of Salt Creek.

In my boyhood when we roamed the fields we could easily step across all of the draws in the neighborhood. Now they have gouged deep into the earth and have become wide and ugly gulches.

As a director of the Salt-Wahoo Watershed Association I fully approve and recommend its statement as filed with this committee. I shall not impose upon the time of this committee by repeating the facts which are set out in that report.

However, I may be able to inject some life into the figures and statistics for the entire Salt Creek Basin by expressing the point of view of a country banker.

Almost all of my business deals with farmers. Their problems are my problems.

Throughout my adult life, with a growing sense of desperation, I have watched while the productivity of our soil has been depleted ever more rapidly by recurrent floods. Regular land treatment practices cannot control the situation. Unless adequate flood water retarding structures, such as those in the corps, project being offered to this Committee are established, it seems certain that this corner of the Salt-Wahoo basin will have little utility for agricultural production at the end of another half century.

Of course it goes without saying that impoundment of flood waters in this area above the city of Lincoln will be of benefit to that city and also to the agricultural areas along either side of Salt Creek clear to its mouth.

In other statements it has been pointed out to this committee that floods in the entire Salt Creek Basin have averaged over 2½ per year, a total of 136 recorded floods from 1900 to 1952. For awhile I kept a personal record of floods and I wish I had continued it to the present time. My personal record, which applies only to the area around Hickman, a small part of the entire Salt Creek Basin, is as follows: September 14, 1941, a very severe flood; May 5, 1942, a moderate flood; May 11, 1942, an extremely severe flood; June 15, 1943, a bad

flood; in June of each of the following years, 1944, 1945, and 1946, floods of considerable proportions; and between June 11 and June 23 of 1947 there were 3 floods, 2 of them very bad. In some of the years following lack of rainfall has prevented floods but, of course, the resulting drought has prevented crops. My neighbor, Ralph Harlan, has given you a personal account of the flood in June 1951.

As a director of the Salt-Wahoo Watershed Association I have donated a great amount of time toward bringing about a cooperative solution for our flood problems. As has been pointed out by others, the corps' plan and the SCS plan are interrelated and dependent upon each other. If both are brought to completion then we can anticipate reasonable flood protection. Certainly Hickman cannot be protected without the two corps' dams on the branches of Salt Creek above Hickman.

Every year that is lost means continued serious damage to the community that is my home. I respectfully urge this committee to approve the authorization of the project submitted by the Army Corps of Engineers.

Mr. JUDAH. Mr. Chairman and gentlemen of the committee, I am a country banker, I live at Hickman, where three creeks merge together. We continually have floods in that area on account of the flooding of these several creeks which come together. We feel that the only solution of the problem is not only the soil conservation program but also the Army engineers' part of this whole project. That, and that alone, will help my town and the many acres of my lands on both sides of the stream, both from the headwaters and down to its mouth. I thank you, and I will not take any more of your time, sir.

Mr. DEMPSEY. Thank you, Mr. Judah.

Mr. WEAVER. Now, Mr. Chairman, also to file a statement and offer a few remarks, we have as our next witness an honest-to-goodness farmer from Nebraska and I do not think that should be any surprise, Mr. Ralph Harlan of Hickman, Nebr., who has personally encountered with his family some of the difficulties from flood in that area.

Mr. DEMPSEY. We will be glad to hear you, Mr. Harlan.

STATEMENT OF RALPH HARLAN, FARMER, HICKMAN, NEBR., DIRECTOR OF SALT-WAHOO WATERSHED ASSOCIATION

Mr. HARLAN. Mr. Chairman, and gentlemen of the committee I will just file this statement. I will not take time to read it.

Mr. DEMPSEY. It will be included in the record at this point.

(The matter referred to is as follows:)

STATEMENT OF RALPH HARLAN, FARMER, POSTOFFICE, HICKMAN, NEBR., DIRECTOR OF SALT-WAHOO WATERSHED ASSOCIATION

To the Flood Control Subcommittee, Committee on Public Works, House of Representatives:

I am a farmer. I have lived on my farm and have operated it for many years. In addition I own and operate other farmland in this area.

For many years I have watched repeated floods in the upper Salt Creek region.

With increasing severity as the years went by, the farmland of my neighbors and my own as well has been damaged. Years ago, before the cultivation of the land had given the floods freer rein, our creeks did not overflow. The stone portion of an old structure on my farm is located near to the banks of the creek where now the location frequently covered by floodwaters.

Through the years I have personally suffered tens of thousands of dollars of damage to crops, livestock, and improvements because of floods and because of the loss of precious topsoil.

Each year the draws of the creeks become deeper and wider, and the streams more choked with sediment.

Perhaps this committee will be interested in a personal account of flood damage from the point of view of a farmer like myself. Many of the statements submitted to this committee give generalized figures as to average annual flood damage. Specific instances sometimes make such figures more understandable.

Take the flood of June 1, 1951, for example. On that evening I with my family was attending a wedding in the neighborhood when the cloudburst hit. My two sons, Dale and Neal, left the wedding reception to return to our farm home to look after the livestock. Later John TenHulzen followed to see if the boys needed help.

As we learned later, the two boys who were both students in the College of Agriculture of the University of Nebraska, had gone to my hogshed to try to save 9 hogs and some 60 pigs. Salt Creek was raging in the lower reaches of my farm.

The pigs were locked in the shed and the boys tried to get them out to higher ground. By the time they had the pigs out of the shed the water was almost up to their chests.

The boys decided they would have to let the pigs go and try to save themselves. The current was so strong that they could do not better than catch a hold on a large tree which stood not far away. During the previous fall season I had intended to bulldoze out that tree. Because I did not do so the lives of my sons were saved. The tree still stands.

Both of the boys had to kick off their boots in order to climb into the branches of the tree. There they spent almost 6 hours enduring extreme cold and fighting the mosquitoes and cankerworms.

In the meantime John TenHulzen had returned to the wedding party reporting that the boys were stranded by the flood. At once we started a rescue party.

I drove my car to the railroad tracks on high ground and shined my spotlight on them. The car was soon surrounded by water. Efforts to send out a boat to the boys were fruitless.

We notified the Army Corps of Engineers and they sent an Army duck. The first Army duck became stuck and another one had to be sent.

It was 3:30 a. m. on that dark Saturday morning before the boys were rescued.

I could give this committee accounts of many other floods which have assaulted my farm and the countryside surrounding it.

The above personal account represents one very small part of the overall flood problems in the Salt Creek watershed. My annual damages represent a part of the total average annual flood damages which amount to $2,120,000 yearly based on 1954 price levels.

There are no words which will adequately express my feeling about the importance of the project submitted to this committee by the Army Corps of Engineers. The future of my family and my sons depends upon the construction of the Corps' project.

I urgently request this committee to include the Corps' project in the authorizations of this Congress.

Mr. HARLAN. I will just take a minute of your time. I could stand here for an hour and talk of the financial losses and various other losses I have had from floods throughout the years.

I want to deal with one aspect that I do not believe has been entered into much today and that is the value that any of us can put on human lives. If you men could put yourselves in the position that I was in about 5 years ago now, you would fully appreciate this situation. The only two children I have are two boys. They are now university graduates from colleges of agriculture, and they have served their country. One night they got caught in a flood trying to save some of my hogs and the only way that we could rescue them was to have the National Guard come in with ducks and the first one got stuck and they had to radio for another one, and they were in a tree on my farm for over 6 hours facing cold, rain, mosquitoes and cankerworms. I am sure that there is not a man here that would say that all of the money in this world, if your sons were in that same predicament was worth spending.

I have been a member of this Salt-Wahoo Watershed Association since its inception and I have worked closely with all of these men. We feel that we must have the completion of this program in connection with what we are here for today, in the Army Engineers' phase of it.

Thank you for your time, gentlemen.

Mr. DEMPSEY. We are glad to have you here anytime, Mr. Harlan.

Mr. HARLAN. I have some pictures here which I would not care to leave, as they are all I have. However, I would be glad to pass them around and show them to you if you would care to see them.

Mr. WEAVER. We have another witness from Wahoo, Nebr., Mr. Emil Placek, who is a country banker there, and is one of the fine citizens of that community and of Nebraska.

Mr. Placek.

Mr. DEMPSEY. Proceed, Mr. Placek.

STATEMENT OF EMIL PLACEK, BANKER, WAHOO, NEBR., AND DIRECTOR OF SALT-WAHOO WATERSHED ASSOCIATION

Mr. PLACEK. Mr. Chairman and gentlemen of the committee, I will make my remarks brief, and also I will file a statement on the situation in the Wahoo watershed.

Mr. DEMPSEY. The statement will be included in the record at this point.

(The matter referred to is as follows:)

STATEMENT OF EMIL PLACEK, BANKER, WAHOO, NEBR., AND DIRECTOR OF SALT-WAHOO WATERSHED ASSOCIATION

To the Flood Control Subcommittee of the Public Works Committee, House of Representatives:

My hometown, the city of Wahoo, takes its name from the stream which represents a substantial part of the flood problem in what is called Salt Creek Basin. Wahoo Creek, together with several tributaries—Cottonwood Creek, Duck Creek, and Sand Creek—arise in the upland areas northwest of the city of Wahoo and converge into the main channel of Wahoo Creek at the city.

Needless to say, the city of Wahoo and the area above and below it have been the victims of many severe and devastating floods.

The plan of the Corps of Engineers includes two floodwater retarding dams on Sand Creek and Duck Creek above Wahoo. These would achieve a reduction in floodwater flows on both Sand Creek and Wahoo Creek.

Also, channel improvement and levees are planned for Wahoo Creek from the vicinity of Weston to the mouth, and on the lower reaches of major tributaries of Wahoo Creek. On Wahoo Creek, above the city of Wahoo, the channels would be straightened to remove extremely sharp bends, and enlarged to provide a bottom width varying from 25 to 30 feet. Below Wahoo the channel would be enlarged to provide a bottom width of 50 feet except in the lower 2 miles where the width would be 100 feet. Levees would be constructed from the Burlington embankment at Wahoo to the mouth to provide an average floodway width of 500 feet. Tieback levees would also be provided along the major tributaries to provide floodways with capacities comparable to that on Wahoo Creek tiself.

We understand that the reservoirs above the city of Wahoo on Duck and Sand Creeks, above mentioned, would store a minimum of 5 inches of runoff and would be designed for safety against the maximum probable floods. The pool areas would be available for recreation purposes, subject to adequate cooperative undertakings by local interests.

On December 16, 1952, the proposed plan of improvement for flood control was presented by the Army Corps of Engineers at a public meeting in Wahoo, Nebr. This meeting was sponsored by the Salt-Wahoo Watershed Association. Many interested landowners were present, and a report was made to them on the pro-

gram for flood control, waterflow retardation, and soil-erosion prevention. Sentiment at the public meeting was generally favorable toward the proposed plan of improvement and no opposition toward the plan was publicly expressed. There was some concern regarding agricultural values in some of the proposed reservoir areas. The Corps of Engineers has agreed that the wishes of local interests will be considered during final determination of exact reservoir sites to the fullest extent practicable consistent with achievement of the intended purpose of the reservoirs.

For half a century I have observed the deterioration of our agricultural economy in the Salt-Wahoo Basins because of recurrent and severe floods and rapid erosion. I have realized that our area cannot continue to be a self-sustaining and prosperous community unless significant steps are taken to control the floods.

From my own experience in banking circles I can readily accept the estimate that the average annual flood damages in the entire basin have amounted to over $2 million based on 1954 price levels.

As a director of the Salt-Wahoo Watershed Association I fully endorse the statement that has been filed with this committee by that association.

Also as a director of that association I have worked through the years to accomplish the coordinated program between the Corps of Engineers and the Department of Agriculture. The planning of this program has now been fully coordinated. In my experience it is a remarkable display of cooperation between these two Federal agencies. It represents an example of the manner in which Federal agencies should coordinate their efforts in attacking many problems.

Local people have been quick to respond to the limits of their ability in pledging participation in the costs of these projects.

I respectfully submit to this committee that the project offered by the Corps of Engineers should receive every encouragement, and I urge that it be given authorization at this session of Congress.

Mr. PLACEK. I was born in the State of Nebraska some 78 years ago, so I know some of the changes that have taken place in the treatment of the farmland there.

I happen to have some 1,200 acres of land in this watershed.

In 1948, I decided to retrace my steps to the Philippine Islands where I had served under Gen. Arthur MacArthur. So we started west and made a trip around the world to study the economy, the potential industries, agricultural and so forth in various countries.

On our trip we visited some 22 countries and I was very much impressed, of course, with the manner and treatment of the soil in various countries, good treatment, bad treatment, and disastrous treatment.

The most impressive thing from the disastrous point of view was in China to see those denuded mountains, and that water for 50 miles out in the ocean was yellow from the erosion constantly washing the soil away.

So, those things impressed me because I had seen the manner in which the Japanese took care of their soil, and how they built walls and how they farmed clear on up to the top of the mountains.

I saw disaster in the land that you read about in the Bible, in Egypt and the Holy Land, nothing but sand where once there was soil and crops raised. On the east side of the Suez Canal there were bunches of grass and dunes with the camels. On the other side of the canal, where they practice some soil conservation and irrigation from the Nile River, everything was green.

So, I came away very much impressed.

I had the first terracing contest on my farm to impress the farmers of the community, being a country banker, with the idea of preserving the soil and of preventing these floods which we have suffered for several years. In fact, we had to build levees around our waterworks and our electric light plants because of the floods from Wahoo and

Sand Creek. So my interest, of course, is to have this flood control as early as we can possibly get it.

Of course, we cannot guarantee that all of the floods can be controlled, but they can all be minimized by practicing soil conservation and by retarding dams.

I have built some dams at my own expense on farms I have. I have about 75 miles of terracing on my own land.

I know that the results are better. We still have some farmers that want to farm up and down hill because they do not like short rows.

Generally, this project here is a worthwhile project, and it is something that we must do to preserve the fertility of the soil, and to prevent it from washing away through these disastrous floods.

I know our Congressmen are interested in that project, and I trust that you will take favorable action on this matter because it is badly needed, not only here, but in every part of the world.

Thank you.

Mr. DEMPSEY. Thank you very much, Mr. Placek.

Mr. WEAVER. Mr. Chairman, our final witness is Mr. Ira Beynon of Lincoln, chairman of the flood-control committee of the Lincoln Chamber of Commerce. Mr. Beynon is one of our fine citizens of Lincoln, Nebr., and he formerly was assistant to Franklin Floete, when Mr. Floete was Assistant Secretary of Defense for Real Property and now Mr. Beynon is on loan from his own activities in Lincoln, Nebr., to Mr. Floete who is presently General Services Administrator.

Mr. DEMPSEY. We will be glad to hear you, Mr. Beynon.

Give your name to the reporter, please.

Mr. BEYNON. My name is Ira D. Beynon, Lincoln, Nebr.

In introducing me, I think my associate, Mr. Weaver, might have added that I had the temerity to run against him for Congress. So, I think, after I speak here, you may feel how fortunate you are in having Mr. Weaver here instead of myself.

STATEMENT OF IRA D. BEYNON, CHAIRMAN, FLOOD-CONTROL COMMITTEE, LINCOLN, NEBR., CHAMBER OF COMMERCE

Mr. BEYNON. I shall speak very briefly about some of the points that the committee has raised.

This action here is the culmination of efforts on behalf of the people of Lincoln which started in 1891. We have organized a sanitary district to take care of this flood situation, and we have spent millions of dollars in widening the channel and in raising dikes and in straightening the channel so as to carry the water off, and their contribution will go on as it has in the past, and the millions that we have spent will make the necessity for spending more millions less at the present time.

Now, I should say that Lincoln is the gateway city for the railroads. We have there the Burlington Railroad, the Union Pacific Railroad, the Rock Island Railroad and the Northwestern, and, as is usually the case, they come up the valleys of these streams and in 1952 and other years, when we had these tremendous floods, these railroads were paralyzed. Those railroads go to the west and go to the south. They serve not only the southern part of Nebraska but they go to Denver, Ogden

and even to Los Angeles. So, the entire western part of the country, in a sense, has been affected by these floods.

Of course, in our city along these railroads, they have built industries, the wholesale houses and over 1,000 homes that are affected when we have these tremendous floods.

Lincoln in a sense lies in a saucer. These two creeks come into the valley, Salt Creek and Wahoo Creek and the water comes in very fast and then the flood is on there while from there on, the water seems to accumulate right in the heart of the city.

Now, there is one other thing that has occurred to me that the committee inquired about of Governor Crosby, about the sharing of expense. I have lived in Lincoln and I was born and raised on a farm there and I still have a farm on Salt Creek with land on both sides of it. That means that flood conditions as they occur in the valley are rather a calamity. I have a farm right along the city, 223 acres, and of that amount 60 acres is subject to flood. Forty acres of that is in timber, grassland, and the rest of it is generally kept in brome grass that will not be subject to flood damage.

Under the farm program we will not be able to change our method of farming. We will not be able to bring up this brome grass. Actually, this year we are permitted to plant less crops than in years before, so that a change in the use of the land will not be affected by the elimination of floods.

Now, this is different from land where Congress has helped us with irrigation.

I have a farm out in the tri-county which was an arid farm which is now being farmed. I believe nearly all of the expense of that project is amortized by the land and it should be so, but down in this narrow valley here which affects only a small number of the farmers, a change in farming will not be anticipated as a result of this flood control.

I do not mean by that that it will not be quite important for those farms. The big dam is taking away fences and culverts. During the last flood we had between two of the culverts a bus full of schoolchildren who were caught there for hours, and it was a question whether there would be a tremendous loss of life. There was some loss of life. That is the thing that we are tremendously interested in about this flood control.

Thank you very much.

(The statement submitted by Mr. Beynon is as follows:)

STATEMENT OF THE LINCOLN CHAMBER OF COMMERCE, LINCOLN, NEBR., REGARDING SALT-WAHOO WATERSHED PROJECT (NEBRASKA), INCLUDED IN THE 1956 RIVERS AND HARBORS OMNIBUS BILL, CORPS OF ENGINEERS

Prompt and favorable action by the appropriate committees and by both Houses of Congress on that particular segment of the omnibus bill dealing with the Salt-Wahoo flood control project in and around Lincoln, Nebr., will push toward culmination an effort which began as early as 1891.

In that year, the citizens of Lincoln, capital city of Nebraska, set up a sanitary district which made the first efforts to control Salt Creek, a relatively small stream running through the city, which proved capable of vicious outbreaks in the years 1908, 1942, 1947, 1950 and 1951.

Today, a masterfully developed, coordinated and integrated plan, worked out jointly by the Army engineers and the Department of Agriculture (Soil Conservation Service), offers an outstanding opportunity to tame this troublemaker with maximum efficiency achieved at minimum cost.

It further offers the Congress a splendid opportunity to encourage and to recognize the statesmanlike approach which officials of both these governmental agencies at all levels have used in studying this longstanding problem and in presenting its solution.

The technical aspects of the plan will be ably outlined in other presentations. However, the Lincoln Chamber of Commerce, in making this presentation, respectfully urges the honorable members of this subcommittee and others who may read it, to give their most earnest consideration to the elemental simplicity, economy, and efficiency of this single plan which utilizes the best flood control techniques of both the engineers and the SCS, while eliminating duplication, overlapping and possible unnecessary expense.

The chamber of commerce has several reasons for urging the most expeditious action possible on this plan, among them being:

(*a*) *Residence damage.*—Several thousand fine Lincoln citizens of modest income live in hundreds of homes on the eastern side of Salt Creek. These homes have taken a merciless beating from the various floods, particularly during the past decade. Their owners have restored them each time, but we submit that they are entitled to be freed of this flooding danger as soon as possible.

(*b*) *Critical condition.*—Antelope Creek, a tributary of Salt Creek which flows through the very heart of Lincoln, has gone on the rampage from time to time. Both residences and business establishments line its banks. Today, the city is growing out toward its headwaters, and the very site on which the engineers plan to construct one of their dams (probably the first to be built) is being preempted by new houses and a school which must be built to serve the occupants. Unless this project moves rapidly, so the engineers can purchase the site, there is grave danger that in later years it would be impossible to establish proper controls at the headwaters of Antelope Creek. This would be a severe blow to this overall program.

(*c*) *Industrial sites.*—A number of fine industries have been established on the west side of Salt Creek, but they have been hard put to survive because of flood damage in the years mentioned. More important, the remaining open area, which would be so valuable for other industrial sites, remains useless so long as Salt Creek remains free to overflow on a moment's notice. This area, when available for new industry, could assure many large new payrolls already need to support the rapidly growing city, whose population now is 125,000. Availability of jobs to Lincoln's citizens is as important as the safety of the homes of those endangered by floods.

(*d*) *Recreation.*—Majority of the 10 'large' dams proposed in the Lincoln vicinity (actually they are very small as flood control dams go, but they are relatively large in comparison to the SCS dams) will be built on sites suitable for permanent lakes. This would provide badly needed recreational outlets within a few miles of Nebraska's second largest city. But, gentlemen of the committee, no part of the cost of such recreational facilities would come from Federal tax moneys. By further interagency cooperation, this time between the Federal engineers and the State game, forestation and parks commission, the construction of the recreation-providing dams would be extended by use of State funds already on hand for this purpose.

(*e*) *Agriculture.*—The Lincoln Chamber of Commerce is fully mindful of the vast benefits accruing to the farmers of the watershed as the Soil Conservation Service dams are constructed. The subject is being covered most adequately in other presentations, but the chamber asks that its zeal for the agricultural aspects be noted as having the same sincerity as that expressed in the items detailed above.

(*f*) *Downstream city.*—Lincoln is anxious to see its neighbor city of Ashland, downstream on Salt Creek, and its several thousands inhabitants also freed from flood dangers. When Lincoln made its first limited attack on Salt Creek and its vagaries, it soon became evident that deepening, widening, and straightening its channel to help the floodwaters pass safely through Lincoln could only result in possibly discharging them with greater force on the citizens of Ashland, Nebr. Ashland was invited to join with Lincoln, from the beginning, in correlated measures to protect itself. Unfortunately, this was not done, and Ashland has suffered as a result. The fine Army-Agriculture plan would protect Ashland, as well as Lincoln, because its primary purpose is to hold the floodwaters back and to permit them to flow down Salt Creek to the Platte River in an orderly fashion when the crisis has passed.

(*g*) *Highways, railroads.*—The Nebraska State Highway Department, as well as the highway and street departments of both Lancaster County and the city of Lincoln—and the several important railroads which serve Lincoln—all suffer great damage when floods hit Salt Creek or any of its tributaries. Because of the many bridges which exist within the urban area and in the watershed generally, the engineers advise that they can perform only part of their normal flood control work related to increasing channel capacity, in this instance. Almost their entire effort must be directed at holding the water out!

The Army engineers and the Soil Conservation Service have devoted years of study to this problem. Each approached its independently, and each came up with its own solution. For a time, there loomed the danger that neither of the separate plans would become a reality, no matter how honestly and how sincerely conceived, or how sorely needed by Lincoln and the entire Salt-Wahoo watershed.

The engineers had been asked to assist as early as 1944, when the first public hearing was held and the preliminary report issued. A full survey was assigned to the Omaha district in 1945, but lack of consistent appropriations delayed the work until 1948. In that year, citizens of Ashland (mentioned above) called for action, and the devastating floods which hit Lincoln in 1950 and 1951 proved conclusively that corrective measures were vitally needed.

By December 1952, Corps of Engineers presented its full-blown plans, following its orthodox techniques for situations of this kind. It involved 17 dams.

But, prior to that date, the Soil Conservation Service was coming up with its own total plan, involving some 165 smaller dams.

Then followed the search for the final formula, under which the two plans could be combined. As stated, the sincere efforts to find this solution, at all levels within the Army engineers and the Department of Agriculture, assisted by the untiring efforts of interested citizens of Lincoln and the entire watershed, did result in the single plan now before the Congress.

It was the happy privilege of the Lincoln Chamber of Commerce, through its flood control committee, to conduct the meeting at which the engineers and the SCS each gave ground and at which they accepted willingly their respective fields of operation within the integrated plan. The date was November 10, 1954.

The following year, there was no omnibus bill before the Congress. Hoping to hurry the Salt-Wahoo project along, Congressman Phil Weaver of the First District, Nebraska, introduced H. R. 6492, a special bill on this subject, in 1955. He was joined by Congressman Robert Harrison, in whose district part of the watershed lies. Both Senators Roman Hruska and Carl Curtis proposed a similar bill in the Senate. While this special bill later was abandoned, its proposal points up still further the significance of the particular project under discussion.

As a final statement, the Lincoln Chamber of Commerce commends to your honorable subcommittee the interest of the taxpayer—both in the Salt-Wahoo watershed and in the Nation generally.

Figures of the Army engineers show the benefit-cost ratio to be 1.6 to 1, which is very high. Many projects are approved with a ratio of only 1.1 to 1. Furthermore, there will be enough saving of average annual flood damage to pay for the project in a relatively few years.

These are matters of properly deep concern to the Congress, but we believe that the cost of this project is more than justified.

We cannot help referring again to the fact that this is a coordinated plan, one of the most unusual in Federal flood control history.

But, if the plan is to remain coordinated, both the SCS and engineers' work must go forward together. SCS has started. The engineers need the green light. It is earnestly requested that your subcommittee approve this plan, and recommend its forward movement at the greatest possible speed.

Respectfully submitted.

IRA D. BEYNON,
Chairman, Flood Control Committee.

Attest:

ARCHIE J. BALEY,
Secretary and General Manager.

Mr. WEAVER. Mr. Chairman, that concludes our witnesses.

I want to express for each one of them their appreciation and thanks to you gentlemen for hearing us on this matter. I trust it can be

expedited and that a favorable report can be made by this committee to the full committee.

Thank you very much.

Mr. DEMPSEY. Thank you, Mr. Weaver.

Mr. ROGERS. I just want to say to our colleague, Congressman Weaver, that I think it was a very fine presentation and I know the committee was very much impressed.

Mr. WEAVER. Thank you very much.

Mr. CRAMER. I want to say that I would like to join in that. I think it has been one of the best organized presentations that we have had before this committee.

Mr. WRIGHT. Mr. Chairman, I would like to go on record also in saying not only that it has been well presented, but it shows evidence of having been extremely well organized in Nebraska prior to their bringing it to us.

I want to say further, if I may, that I have told my colleague, Mr. Weaver, that Lincoln is one of my favorite cities. I was there during the war and I was tempted to stay there. It is a fortunate thing that I did not. If Mr. Beynon had not knocked me off, Mr. Weaver would have.

Mr. CRAMER. I would like to say that I appreciate the fine presentation which these gentlemen have made and to say to Mr. Beynon also that if my folks had not decided to move from Lincoln when they did many years ago, I would probably be Mr. Weaver's constituent.

Mr. SMITH. It is quite obvious that the high quality of Lincoln is due to some of the people who left.

Mr. MACK. Mr. Chairman, I have driven across country about 20 times in the last 20 years, and on many of those trips, I have passed through Lincoln. I write a newspaper column and I have said in that column several times that of all the cities I have seen in America, Lincoln is one of the most beautiful.

Mr. PLACEK. Stop in Wahoo the next time.

Mr. DEMPSEY. We will now adjourn until 10 o'clock tomorrow morning.

(Thereupon, at 12:20 p. m., the subcommittee adjourned until tomorrow, Wednesday, May 16, 1956.)

FLOOD CONTROL OMNIBUS BILL

WEDNESDAY, MAY 16, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to recess, at 10 a. m., in room 1302, New House Office Building, Hon. John. J. Dempsey presiding.

Mr. DEMPSEY. The subcommittee will be in order.

Mr. Weaver, we will hear you at this time on Senate bill 1358, which is the same as your bill H. R. 4702.

S. 1358 AND H. R. 4702, TO AUTHORIZE MODIFICATION OF THE FLOOD-CONTROL PROJECT FOR MISSOURI RIVER AGRICULTURAL LEVEE UNIT 513–512–R, RICHARDSON COUNTY, NEBR.

STATEMENT OF HON. PHIL WEAVER, A MEMBER IN CONGRESS FROM THE STATE OF NEBRASKA—Resumed

Mr. WEAVER. Thank you, Mr. Chairman.

The bill I introduced was H. R. 4702, which is identical to the bill that was introduced in the Senate and which passed the Senate. However, the Senate amended the bill to exclude section 1 and a portion of section 2 which referred to Federal participation in the construction of a bridge southwest of Rulo, Nebr., and retained within the Senate bill Federal participation for construction of a bridge southeast of Rulo, Nebr.

I can report to you that I have no objection to the Senate bill with the amendment. That is also agreeable with the local interests concerned. And I am certainly happy to accept that bill as is.

I can also state to you that there has been no objection to this by the Bureau of the Budget. They have O. K.'d this item for $163,500. And also the Department of the Army has through the Corps of Engineers given us a report of approval on it.

That is all the time I want to take, Mr. Chairman, because I know you have other matters coming before you. I trust that this matter can be expedited favorably by this subcommittee to the full committee and want to thank you for your time. However, I would like to file my statement on this matter.

Mr. DEMPSEY. You may submit your statement for the record; also there will be inserted a statement by Mr. Avery.

(The prepared statements of Mr. Weaver and Mr. Avery follow:)

STATEMENT OF CONGRESSMAN PHIL WEAVER REGARDING H. R. 4702

Mr. Chairman and gentlemen of the subcommittee, I appreciate the courtesy you have extended to me today to appear before you on behalf of my bill, H. R.

4702, which would authorize modification of the flood-control project in the Missouri River agricultural levee unit No. 513–512R, lying within the area of drainage district No. 1, Richardson County, Nebr., to include Federal participation in constructing a new bridge near the mouth of the Nemaha River in Richardson County, Nebr., which was destroyed by the flood of 1951 and altering an existing bridge southwest of Rulo, Nebr.

For your information, the companion measure to my bill, S. 1358, which was introduced in the Senate by Senators Curtis and Hruska, was passed by the Senate on May 9, 1956, after a favorable hearing before the Senate Public Works Committee. The Senate bill, identical to my bill, was amended to delete from page 2 of the bill any reference to the bridge 2½ miles southwest of Rulo, Nebr. Retained within the Senate bill was the provision for Federal construction of the washed-out bridge at the mouth of the Nemaha River. I can state to the members of this subcommittee that this Senate amendment meets with my approval and with the approval and concurrence of local interests.

On April 4, 1956, I received a copy of a letter addressed to the Honorable Charles A. Buckley, chairman of this committee, from the Honorable Wilber M. Brucker, Secretary of the Army, in which it was stated, and I quote, "While the Chief of Engineers had recommended no objection to the enactment of S. 1358, in view of the comments of the Bureau of the Budget the Department of the Army suggests that the bill be amended so as to provide for Federal participation in the construction of only the new bridge near the mouth of the Nemaha River. This could be accomplished by deleting that portion of page 2 referring to the bridge 2½ miles southwest of Rulo, Nebr. The cost of the alteration and construction proposed in the bill, if so modified, is estimated to be $163,500. The Bureau of the Budget advised that there would be no objection to the submission of a similar report on a companion bill, S. 1358."

At this point, Mr. Chairman, I would like to insert for the record the entire letter from the Secretary of the Army to the chairman of this committee. I would also like to include for the record the text of a letter that I received under date of April 2, 1956, from Mr. Robert E. Merriam, Assistant to the Director of the Bureau of the Budget, in which it is stated:

"DEAR PHIL: I am returning herewith, in accordance with your request, the brief of proponents pertaining to H. R. 4702. The Department of the Army informs me that it is forwarding a report on this bill and its companion bill, S. 1358, which will recommend Federal construction of the washed-out bridge at the mouth of the Nemaha River. We have indicated no objection to this report."

I would like, at this time, to review in some detail the background of this matter so that the members of this subcommittee may have before them the pertinent facts of this issue. I have visited at length with local interests, and particularly with Mr. Archibald J. Weaver, attorney for drainage district No. 1 of Richardson County, Nebr. In view of this background, I would like to outline the brief of proponents.

Before the beginning of World War II, in certain litigation between landowners in the lower Nemaha River Valley in Richardson County, Nebr., and drainage district No. 1 of Richardson County, Nebr., an order of mandatory injunction had been issued ordering the drainage district to increase the size of certain of its channels in the lower valley of the Nemaha River to accommodate an increased flow of water. Prior to the war, the district board adopted plans and specifications for the work necessary to comply with this order; however, before any work could be undertaken, World War II started and further action was deferred during the war.

In 1947 the district board again considered the matter of enlarging its channels, and to comply with this order an engineer was retained. Plans and specifications were drawn and approved and adopted by the district board. An estimate of costs was adopted and a special assessment was ordered against all of the lands in the district for the purpose of raising the necessary funds to carry out the proposed work.

Shortly thereafter, representatives of the Army engineers contacted the officers of the drainage district and informed them that they hoped to build some Pick-Sloan agricultural levees in the lower Nemaha Valley and that if the drainage district would postpone the work it contemplated, the engineers would try to perfect their plans and advise them. Some of the landowners in the lower valley at that time were insisting that the drainage district go ahead and comply with the court order. However, these people were contacted and an informal agreement was obtained from them permitting further work by the drainage district to be postponed pending the outcome of negotiations with the Army engineers.

In 1948, an informal meeting was held in Falls City, Nebr., including members of the drainage district board of supervisors, landowners from the lower Nemaha Valley, and two representatives of the Army engineers. Several weeks later a similar meeting was held at the office of the engineers in Kansas City, Mo. At this meeting, the proposed plan of the engineers was discussed in detail with particular reference to the impact of the proposed construction upon the county roads and bridges within the area. At that time, Col. Paul D. Berrigan, district engineer at Kansas City, told the district board and the county officers present that the engineers were empowered under the law to pay the entire cost of raising the present bridges to the height which would be required if the levees were built, but that it would be the obligation of "local interests" to assume the cost of lengthening the bridges and building the necessary approaches to get the roadways onto the bridges.

Because of the fact that it was necessary to form a new drainage district to succeed drainage district No. 1 for the purpose of contracting for the necessary maintenance subsequent to the expiration of the charter of drainage district No. 1, it was agreed that a public meeting be held in Falls City, Nebr., on April 28, 1948. This meeting was held and all of the local people concerned were present including Mr. Sydney C. Davis, of the Army engineers office in Kansas City, and the 34 landowners, most of whom owned land in the affected areas of the lower Nemaha Valley. At this meeting, Mr. Davis went over the plans of the Army engineers for the proposed works in full detail and publicly stated to everyone present that the engineers would raise the present bridges in place but that it would be necessary for the district or the county to pay the expense of lengthening the bridges and running the roadways up onto the bridges. He further mentioned why it was necessary to form a new district in order that these costs could be maintained after the charter of drainage district No. 1 expired. By unanimous vote, the landowners agreed to proceed with the steps necessary to form this district to be known as drainage district No. 7 of Richardson County, Nebr.

In June of 1948, the statutory petition for the formation of drainage district No. 7 was duly filed with the county clerk of Richardson County, Nebr., and referred to the county engineer of Richardson County, Nebr., for the purpose of outlining the boundaries of the proposed district as provided by law. The necessary report of the county engineer was filed, hearing had thereon, an election called and drainage district No. 7 was duly organized, the organization having been completed about December 1, 1948.

Meanwhile on September 14, 1948, the board of supervisors of drainage district No. 1 of Richardson County, Nebr., passed a resolution as requested by the Corps of Engineers asking that the levee proposed be constructed and given the assurances required. Copy of this resolution appears as exhibit No. 1. Receipt of this resolution was acknowledged by letter from the Kansas City office of the Army engineers dated September 27, 1948 (exhibit No. 2).

Thereafter, drainage district No. 1 had a survey made of the interior drainage situation behind the proposed levees, a report was prepared by the engineer for the district designating places for drainage outlets through the levees and this report was forwarded to the Corps of Engineers at Kansas City on December 22, 1948.

During this period, Mr. Ben C. Dale, county engineer of Richardson County, had been in touch with the Army engineers regarding the necessary bridge alterations as evidenced by letter from D. H. McCloskey, chief of the engineering division at Kansas City (exhibit No. 3).

During the winter of 1949 the work of preparing the detailed specifications for the necessary rights-of-way were completed and on March 21, 1949, the board of supervisors authorized and directed the attorney for the district to commence condemnation actions for the acquisition of right-of-way as soon as final clearance thereon was obtained from the Corps of Engineers.

On March 15, 1949, a meeting was held at the Kansas City office of the Corps of Engineers. In addition to Col. Paul D. Berrigan and three representatives of the engineers, there were present the attorney for the drainage district No. 1, the county engineer of Richardson County, Nebr., Mr. Harold Hoskins of Harold Hoskins & Associates, engineers for drainage district No. 1, and the board of supervisors of drainage district No. 1. At this meeting the Army engineers presented plans for the modification of the bridges here involved, which plans showed that the bridge at the mouth of the Nemaha River was to be raised 8 feet and that new piers were to be built so as to realine the bridge.

The Government was to pay this expense. The bridge southwest of Rulo, Nebr., was to be raised 10 feet with the Government to raise the bridge. The drainage district was to lengthen both bridges as necessary and to provide the necessary approaches.

Following this meeting and pursuant to a request from Mr. Ben C. Dale, the county engineer of Richardson County, Nebr., Colonel Berrigan, district engineer at Kansas City for the Army engineers, wrote Mr. Dale a letter with reference to the bridges in question. Copy of this letter appears as exhibit No. 4. In this letter Colonel Berrigan said with reference to the bridge at the mouth of the Nemaha River:

"It is understood that this office will arrange to raise and/or relocate the present bridge, whichever is the least expensive, in the event that you are unable to proceed as outlined above."

and with reference to the bridge 2½ miles southwest of Rulo, Nebr., Colonel Berrigan said:

"It was further agreed that this office would raise the present bridge if the new bridge plans did not materialize. In this case, the new approach spans and additional piers, together with the required approach ramp, would be constructed by and at the expense of your office and Drainage District No. 1."

On April 6, 1949, Drainage District No. 1 commenced the filing of condemnation suits for the acquisition of the right-of-way for the construction of proposed levees; these condemnation actions were concluded promptly, and in June of 1949 contracts were let by the Army engineers for the construction of the first sections of the levee.

No further word concerning the bridge situation was received by Drainage District No. 1 until March 6, 1951, at which time the county engineer of Richardson County received a letter from the district engineer at Kansas City, that individual now being Col. L. J. Lincoln (exhibit No. 5). This letter stated in effect that the engineers would not carry out their previous commitment with reference to raising the bridges. An immediate conference with the Army engineers at Kansas City concerning this matter indicated that the engineers were very sorry that it happened, there was nothing they could do about it. It appears from this meeting that the Chief of Engineers in Washington had notified the Kansas City office in April of 1949 that the bridge modification was not permissible. This was about the same time as the date of the letter heretofore referred to as exhibit No. 4 wherein the Kansas City office definitely agreed and promised to raise the bridges. Yet nothing was said to any of the local parties concerned about this ruling from Washington until the letter of March 6, 1951 (exhibit No. 5), some 2 years later and after the work of constructing the levees was virtually completed.

On March 19, 1951, the Board of Supervisors of Drainage District No. 1 of Richardson County, Nebr., adopted a resolution (exhibit No. 6) wherein the district went on record as refusing to accept any portion of the completed works unless and until the Army engineers complied with their agreement to raise and modify the bridges. Copies of this resolution were forwarded to the district office of the Army engineers at Kansas City (exhibit No. 7), and to the office of the Chief of Army Engineers at Washington, D. C. (exhibit No. 8), as well as copies to Nebraska Senators Butler and Wherry and Congressman Carl Curtis from the First District of Nebraska. Receipt of the resolution was acknowledged by the district engineer at Kansas City under date of April 4, 1951 (exhibit No. 9), and by the Chief of Engineers under date of April 9, 1951 (exhibit No. 10), followed with a long letter from the Chief of Army Engineers on May 14, 1951 (exhibit No. 11), wherein it was stated:

"It is regrettable—that local interests were not advised of the adverse decision at an earlier date."

The authorities of Richardson County and the Board of Drainage District No. 1 of Richardson County, Nebr., recognized the great danger to the bridges due to their location at a much lower level than the tops of the levees and considered the bridge southwest of Rulo, Nebr., in the greater danger of the two. They immediately let a contract for and had this bridge raised some 10 feet at a total cost of $17,500. Since it was spring and rains were prevalent, it was only with great difficulty that the contractor was able to complete the work of raising this bridge. The work was done during the only time of that season of the year when it could have been done, and as a result, the bridge survived the floods that followed. The bridge at the mouth of the Nemaha River was not raised because of insufficient time, and as a result, it was destroyed in the ensuing floods of that year on July 6, 1951.

The local people had contended that the engineers should live up to their original commitment, and since this could not be done due to the destruction of the one bridge, that the bridge destroyed should be replaced and that in lieu of raising the bridge which was raised by the county and the drainage district, the engineers should do the work of lengthening the bridge which was originally to have been done by the drainage district. This position was expressed in a conference with Colonel Lincoln, district engineer at Kansas City, on February 13, 1953. Colonel Lincoln's summary of this conference appears as exhibit No. 12.

Gentlemen, these are the facts which I respectfully urge be given every fair consideration so that this measure can be reported favorably out of your Subcommittee and your Full Committee to the Floor of the House.

In conclusion, may I point out and insert for the record a copy of a letter addressed to the Bureau of the Budget at the time they were considering this matter written by Congressman William H. Avery of Kansas, a part of whose district is immediately south of Richardson County, Nebraska. I am quoting in part from his letter as follows:

"My interest in this legislation is more than perfunctory. Several of the Counties in my Congressional District adjoin Richardson County, Nebraska, and were served by a bridge near the mouth of the Nemaha River which was destroyed by the flood of 1951. The Federal Government, represented by the Corps of Army Engineers, assumed liability for loss of the bridge because of incomplete work on protective levees which contributed to the flood damage, but the fact remains no replacement structure has been erected. Meanwhile, thousands of persons in sizeable areas of Kansas, Nebraska and Missouri are experiencing marked transportation difficulties as a result of the inaction of the responsible agencies.

"As I have pointed out, this is not a local matter. The public welfare demands the restoration of this vital transportation link. In the event of national emergency, this traffic artery would be an invaluable asset to civil defense evacuation and the movement of military supplies and equipment.

"Importance of the bridge project to my home State is evidenced by the fact the Kansas Highway Commission already has blacktopped Highway 7 north and west from White Cloud to the Nebraska-Kansas line as a token of good faith and is prepared to raise the road bed to make it a high water road and a major State highway. Kansas Highway 7 is an important State highway which begins at the Nebraska line and continues south through Troy and Atchison the length of the State. However, northbound traffic on this fine road is disrupted at the Nemaha River because of the missing bridge."

I would also like to insert for the record a paragraph from a letter I received from Mr. Wm. F. Perkins, Director of Revenue and Taxation for the State of Kansas in which he says:

"You will recall that the Kansas Highway Commission gave Kansas Highway Number 7 an oil treatment to the State line last summer as an act of good faith in that by maintaining a permanent highway the bridge going across the Nemaha and Nebraska would bring an all weather road to the State line. I can go further than this, and tell you that I have talked with the Highway Commission and the Director of Highways, and that when the Nemaha bridge is back in that Kansas will raise Number 7 from White Cloud to the Nebraska line and provide a 'high water road'."

Thank you, gentlemen, for your attention and for the courtesy of hearing me on this matter.

Hon. CHARLES A. BUCKLEY,
Chairman, Committee on Public Works,
House of Representatives.

DEAR MR. CHAIRMAN: Reference is made to your request for the views of the Department of the Army with respect to H. R. 4702, 84th Congress, a bill "To authorize modification of the flood-control project for Missouri River Agricultural Levee Unit 513-512-R, Richardson County, Nebraska."

The Department of the Army has considered the above-mentioned bill. The purpose of the bill is to authorize modification of the project for Missouri River Agricultural Levee Unit 513–512–R lying within the area of Drainage District No. 1 in Richardson County, Nebraska, to include at Federal expense the relocation and construction of certain highway bridges over the Nemaha

River as follows: (1) Altering an existing bridge 2½ miles southwest of Rulo by raising the existing approach spans and piers, adding 36-foot spans and abutments to the ends of the bridge, and constructing approach embankments; (2) constructing a new bridge near the river mouth to replace a structure destroyed by the flood of 1951, the new bridge to be 300 feet long with a 22-foot roadway.

The flood control project for levee unit 513–512–R was authorized by the act of August 18, 1941 (55 Stat. 638), as modified by the Act of December 22, 1944 (58 Stat. 887), subject to the condition that local interests provide without cost to the United States all lands, easements and rights-of-way necessary for the construction of the project. The Department has interpreted this provision to include highway alterations at the expense of local interests. For this project, local interests have furnished rights-of-way with the exception that they have not completed the alteration of the highway bridges involved. Local interests contend that the alterations should be at Federal expense, their contention being based primarily on indications in a letter from the District engineer at Kansas City, Mo., to the Richardson County Engineer dated April 8, 1949, that the Federal Government would participate in highway bridge alterations. Subsequent to the date of that letter, a complete review of the situation by the Department in Washington led to the conclusion that performance of the work at Federal expense would not be in accordance with the authorizing Act, and local interests were so advised by letter of March 6, 1951.

In April 1951, after local authorities had been notified of the inability of the Federal Government to undertake the work concerned, a large portion of the Federal levee and channel improvement project along the Nemaha River had been completed. Shortly thereafter, local interests even though protesting the change in the original agreement raised the bridge referred to at (1) above and undertook preparation for raising the other bridge. In May and July 1951, extremely high waters occurred on the Nemaha, and in the latter month, the bridge near the mouth of the river failed.

Thus, the original agreement by the District Engineer indicated erroneously that the Federal Government would participate in the bridge alterations under consideration. Local interests accepted the project with this understanding which was not corrected for almost two years.

In the attached letter to the Committee dated February 7, 1956, the Bureau of the Budget states that it considers that S. 1358 should be amended to provide (a) that any Federal participation in the replacement of the washed out bridge should be limited to the excess of its replacement cost over what it would have cost the county to raise it prior to the 1951 flood and (b) that no Federal participation in the cost of raising the other bridge is warranted, since the county has already accomplished the work as one of the customary legal requirements for local participation in the cost of this type of project.

While the Chief of Engineers had recommended no objection to the enactment of S. 1358, in view of the comments of the Bureau of the Budget the Department of the Army suggests that the bill be amended so as to provide for Federal participation in the construction of only the new bridge near the mouth of the Nemaha River. This could be accomplished by deleting that portion of page 2 referring to the bridge two and one-half miles southwest of Rulo, Nebraska. The cost of the alteration and construction proposed in the bill if so modified is estimated to be $163,500.

The Bureau of the Budget advised that there would be no objection to the submission of a similar report on a companion bill, S. 1358.

Sincerely yours,

WILBER M. BRUCKER,
Secretary of the Army.

EXECUTIVE OFFICE OF THE PRESIDENT,
BUREAU OF THE BUDGET,
Washington 25, D. C.

Hon. PHIL WEAVER,
House of Representatives,
Washington 25, D. C.

DEAR PHIL: I am returning herewith, in accordance with your request, the brief of proponents pertaining to H. R. 4702. The Department of the Army informs me that it is forwarding a report on this bill and its companion bill,

S. 1358, which will recommend Federal construction of the washed-out bridge at the mouth of the Nemaha River. We have indicated no objection to this report.

With best regards.

Sincerely yours,

ROBERT E. MERRIAM,
Assistant to the Director.

FEBRUARY 25, 1956.

Mr. ROBERT E. MERRIAM,
Assistant to the Director, Bureau of the Budget,
Washington 25, D. C.

DEAR MR. MERRIAM: I am writing in reference to H. R. 4702 and companion bill S. 1358, which authorizes modification of the flood-control project for Missouri River agricultural levee unit 513–512–R, Richardson County, Nebr., to include Federal participation in certain highway bridge relocation and construction over the Nemaha River in southeast Nebraska.

My interest in this legislation is more than perfunctory. Several of the counties in my congressional district adjoin Richardson County, Nebr., and were served by a bridge near the mouth of the Nemaha River which was destroyed by the flood of 1951. The Federal Government, represented by the Corps of Army Engineers, assumed liability for loss of the bridge because of incomplete work on protective levees which contributed to the flood damage, but the fact remains no replacement structure has been erected. Meanwhile, thousands of persons in sizable areas of Kansas, Nebraska, and Missouri are experiencing marked transportation difficulties as a result of the inaction of the responsible agencies.

As I have pointed out, this is not a local matter. The public welfare demands the restoration of this vital transportation link. In the event of national emergency, this traffic artery would be an invaluable asset to civil defense evacuation and the movement of military supplies and equipment.

Importance of the bridge project to my home State is evidenced by the fact the Kansas Highway Commission already has blacktopped Highway 7 north and west from White Cloud to the Nebraska-Kansas line as a token of good faith and is prepared to raise the roadbed to make it a high-water road and a major State highway. Kansas Highway No. 7 is an important State highway which begins at the Nebraska line and continues south through Troy and Atchison the length of the State. However, northbound traffic on this fine road is disrupted at the Nemaha River because of the missing bridge.

It is my understanding the Corps of Army Engineers has given its approval to the legislation in question. In view of the facts I have presented, I hope you will do everything possible to expedite approval of the legislation by the Bureau of the Budget.

If you desire additional information, please do not hesitate to call on me.

Yours very truly,

WM. H. AVERY,
Member of Congress.

STATE COMMISSION OF REVENUE AND TAXATION,
DIRECTOR OF REVENUE,
Topeka, Kans., March 30, 1956.

Mr. PHIL WEAVER,
Walls City, Nebr.

DEAR PHIL: You will recall that I had John Adair of Atchison, Kans., contact you regarding the background of the Nemaha bridge controversy.

I have heard that a bill has been introduced in Congress again that would solve this problem, and see that the bridge was replaced.

I would appreciate any information which you can give me on this bill, as to its number, present status, and its sponsor, and I will do all that I can from the Kansas side of the line to see that the bridge is replaced.

You will recall that the Kansas Highway Commission gave Kansas Highway No. 7 an oil treatment to the State line last summer as an act of good faith in that by maintaining a permanent highway the bridge going across the Nemaha and Nebraska would bring an all-weather road to the State line. I can go further than this, and tell you that I have talked with the highway commission and the director of highways, and that when the Nemaha Bridge is back in,

Kansas will raise No. 7 from White Cloud to the Nebraska line and provide a high-water road.

I have recently talked to Mr. Adair and enlisted his aid in our common cause.

Very truly yours,

WM. F. PERKINS.

EXHIBIT No. 1

RESOLUTION DECLARING THE POLICY OF DRAINAGE DISTRICT NO. 1 OF RICHARDSON COUNTY, NEBR.

Whereas the Congress of the United States of America has authorized, under the direction of the Secretary of the Army and supervision of the Chief of Engineers, Corps of Engineers, United States Army, levees and other works of improvement on the Missouri River to protect people and property, in accordance with plans approved by the Chief of Engineers on recommendation of the Board of Engineers for Rivers and Harbors and as amended by further surveys and studies; and

Whereas the Federal Flood Control Act of December 22, 1944, provides that no money appropriated under the authority of such acts shall be expended on the construction of any project until States, political subdivisions thereof, or other responsible local agencies have given assurances satisfactory to the Secretary of the Army with respect to such projects; and

Whereas Drainage District No. 1 of Richardson County, Nebr., is a public corporation, organized under article 3 of chapter 31, Revised Statutes of Nebraska, 1943, and acts amendatory thereof, and as such public body has statutory control over flood protection within the limits of said drainage district, which extends along the right bank of the Missouri River between mile 511.4 and 514.2, in which area there is approximately 7,500 acres subject to flood hazard; and

Whereas additional levees and other flood protection works are desirable and necessary to give adequate and proper flood protection to said Drainage District No. 1 of Richardson County, Nebr., its inhabitants and property lying therein: Now, therefore, be it

Resolved, That, Drainage District No. 1 of Richardson County, Nebr., furnish the required assurances hereinafter designated, that this body will cooperate with the Federal Government to effect the construction of a flood-control system as outlined in the plan contained in the Federal Flood Control Act of December 22, 1944:

(*a*) That Drainage District No. 1 of Richardson County, Nebr., agrees to comply with the requirements of said act and to provide, without cost to the United States, all lands, easements, and rights-of-way necessary for construction.

(*b*) That Drainage District No. 1 of Richardson County, Nebr., will hold and save harmless the United States from damages due to the construction work.

(*c*) That Drainage District No. 1 of Richardson County, Nebr., will maintain and operate all the works after completion until the expiration of its charter in 1956 in accordance with the regulations prescribed by the Secretary of the Army; be it further

Resolved, That the above and foregoing become effective when and if, and only when and if, the landowners in the area effected form a drainage district pursuant to the laws of the State of Nebraska, and agree with the Secretary of the Army, and the Corps of Engineers that said district to be formed will maintain said works subsequent to the expiration of the charter of the Drainage District No. 1 of Richardson County, Nebr.

Passed this 14th day of September 1948 by the Board of Supervisors of Drainage District No. 1 of Richardson County, Nebr.

H. C. ZOELLER,
Chairman, Board of Supervisors.
E. H. TOWLE,
Secretary.
C. R. FOURAKER,
Supervisor.
E. E. DOWELL,
Supervisor.
L. M. WEAVER,
Supervisor.

EXHIBIT No. 2

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS,
OFFICE OF THE DISTRICT ENGINEER,
Kansas City, Mo., September 27, 1948.

Mr. ARCHIBALD J. WEAVER,
Attorney at Law, Falls City, Nebr.

DEAR MR. WEAVER: Receipt is acknowledged with thanks of your letter of September 15, 1948, addressed to Mr. S. C. Davis of this office, and of the inclosures attached thereto.

In connection with the resolution of the drainage district board declaring the policy of the board, it is considered to be desirable to have the new district organization completed at the earliest practicable date because the approval of the assurances of district No. 1 is contingent upon receipt and approval of those from the new district.

It is respectfully requested that a statement of the financial condition of district No. 1 be submitted to this office for approval in the near future. The statement will be used to determine the financial ability of the district to furnish the lands, easements and rights-of-way for construction of the project. The statement should reflect also the annual maintenance tax that can be levied by district No. 1. In connection with the statement, it is considered desirable that an estimate of the expenditures to be incurred by the district in connection with the project be shown.

It is noted that the board for district No. 1 has instructed its engineer, Mr. Hoskins of Lincoln, Nebr., to prepare drainage plans for the interior of the proposed unit. Mr. Davis of this office will confer with you in the near future regarding this work. If additional data or maps are needed for use by Mr. Hoskins or the board, every effort will be made to comply promptly with the request.

Sincerely yours,

D. H. MCCOSKEY,
Chief, Engineering Division
(For the District Engineer).

EXHIBIT No. 3

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS,
OFFICE OF THE DISTRICT ENGINEER,
Kansas City, Mo., January 31, 1949.

Mr. BEN C. DALE,
County Engineer,
Richardson County, Falls City, Nebr.

DEAR MR. DALE: There are returned herewith the plans of the 120- and 150-foot span bridges over the Nemaha River transmitted to this office with your letter of December 22. Copies of the plans have been made for use in study of the levee project and in the determination of proposed work on the bridges. Your cooperation in furnishing the plans and comments thereon are greatly appreciated.

It is proposed that this office contact you upon completion of preliminary studies on these bridges and arrange for a conference.

In connection with the matter of State and Federal road assistance, and cooperation on the construction of new bridges in the area, it will be appreciated if you will advise when you expect to complete your investigation along with these lines. Work on the construction plans for the unit is approaching the point where the bridge problems require immediate attention.

Sincerely yours,

D. H. MCCOSKEY,
Chief, Engineering Division
(For the District Engineer).

EXHIBIT No. 4

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS,
OFFICE OF THE DISTRICT ENGINEER,
Kansas City, Mo., April 8, 1949.

Mr. BEN DALE,
County Engineer,
Richardson County, Falls City, Nebr.

DEAR MR. DALE: Reference is made to the conference of March 28 in this office, which was arranged to discuss the highway bridges effected by the proposed levee project on the Great Nemaha River near Rulo, Nebr. Those present at the conference were yourself and Messrs. D. H. McCoskey, George Feil, W. J. Ware, and S. C. Davis of this office.

In order that the general conclusions reached in this conference may be readily available to all interests affected by the conference, this letter is prepared as a general memorandum of understanding on which negotiations in connection with the highway bridges will be based.

This office has determined that the highway bridge at the mouth of the Nemaha will be raised approximately 8.32 feet. The bridge south of Rulo, known locally as the Randolph Bridge, will be raised approximately 9.97 feet and lengthened about 85 feet. The State Line Bridge over Roy's Branch will be raised approximately 10.1 feet.

Regarding the bridge at the mouth of the Nemaha River, it was agreed that your office would request the State of Nebraska to prepare plans and specifications for a new bridge, for which work you now have a commitment from the State highway department office. The substructure would consist of 4 piers and be designed to support a superstructure consisting of continuous-type deck girder spans of 65–155–65 feet on which a 22-foot roadway concrete slab would be placed. The bridge piers and end-wing walls, if required, would be built under Government contract at Government expense on a site immediately downstream from the present bridge. The new alinement will be nearly perpendicular to the stream channel. The Government will assume no part of the cost of subsurface exploration, design or other work in connection with the bridge plans. The cost of the superstructure and of the approach ramps to this bridge would be an obligation of your office and drainage district No. 1 to determine. It is understood that this office will arrange to raise and/or relocate the present bridge, whichever is the least expensive, in the event that you are unable to proceed as outlined above. In this case, the approach fills will be constructed by and at the expense of drainage district No. 1.

In connection with the Randolph Bridge, you suggested a duplicate of the one described above be provided for in place of raising and lengthening the present crossing. As in the case of the bridge at the mouth of the Nemaha, you stated that the design, plans, and explorations for the structure would be prepared by the State of Nebraska. You proposed, also, that the new bridge be constructed at a point immediately downstream from the parallel to the present structure. It was agreed that this office would contract, and pay, for the piers and abutments for the new bridge and that the superstructure and approach fills would be constructed and paid for under arrangements to be made by your office and drainage district No. 1. It was further agreed that this office would raise the present bridge if the new bridge plans did not materialize. In this case, the new approach spans and additional piers, together with the required approach ramp, would be constructed by and at the expense of your office and drainage district No. 1.

It has been determined that the State Line Bridge over Roy's Branch will require a raise of about 10 feet. In a telephone conversation on March 30 between you and Mr. Sydney Davis of this office, you stated that this bridge is comparatively new and that you do not propose any revisions to the structure. It is proposed that this office contract to raise this bridge in place and that the earth approach ramp will be constructed by and at the expense of drainage district No. 1.

It is further understood that this office will contract for any required changes in the Chicago, Burlington & Quincy railroad bridge across the Nemaha, east of Preston, on rights-of-way to be provided by drainage district No. 1.

It is suggested that you review the discussions outlined in this letter and confirm them if you find them to be in agreement with your understanding.

Sincerely yours,

P. D. BERRIGAN,
Colonel, Corps of Engineers, District Engineer.

EXHIBIT No. 5

DEPARTMENT OF THE ARMY, CORPS OF ENGINEERS,
OFFICE OF THE DISTRICT ENGINEER,
Kansas City, Mo., March 6, 1951.

Mr. BEN C. DALE,
County Engineer, Richardson County,
Falls City, Nebr.

DEAR MR. DALE: Reference is made to your letter of January 4, 1950, and to a number of discussions of representatives of this office with you and others, all relative to the alteration of bridges over the Nemaha River, and the proposed relocation of county roads in connection with the Missouri River agricultural levee project near the mouth of the Nemaha River. The problem relating primarily to allocation of funds for certain bridge work has been vexatious and has required prolonged consideration and study by the division engineer and the Chief of Engineers which accounts for the delay in this further reply to your letter.

After careful consideration of all the factors relating to the project, the conclusion has been reached that, under the authority provided in existing flood-control acts and in the project document, the Federal Government cannot participate in new bridge construction for the modification of highway bridges, including approaches. Accordingly, it appears that the suggested cost allocations and plans, as discussed during several conferences and in a letter from this office to you dated April 8, 1949, which had served as a basis of preliminary planning, will be subject to revision. Mr. S. C. Davis will arrange to discuss these matters with you further at an early date.

In view of the interest in this subject by officers of the levee district No. 1 and levee district No. 7, a copy of this letter is being furnished to Mr. A. J. Weaver and Mr. Joseph C. Reavis, attorneys for the above-named districts, respectively.

The interest and cooperation shown by you and others who have participated in conferences and discussions relative to the bridge problems are very much appreciated.

Sincerely yours,

L. J. LINCOLN,
Colonel, Corps of Engineers, District Engineer.

EXHIBIT No. 6

RESOLUTION

Whereas this board, being the board of supervisors of drainage district No. 1, of Richardson County, Nebr., on behalf of said district, did on September 14, 1948, pass a resolution giving certain assurances to the Corps of Engineers of the Department of the Army in connection with the construction of levee unit 513–512R by the Corps of Engineers; and

Whereas said resolution was induced by certain plans prepared by the Corps of Engineers for the construction of said levee unit and submitted to this board, which plan provided for the raising and modification of certain highway bridges by the Corps of Engineers; and

Whereas, pursuant to said plan and resolution, this board obtained and made available to the Corps of Engineers the rights-of-way as requested by the Corps of Engineers and has in all respects complied with its part of said bargain; and

Whereas the levees proposed are now virtually finished; and

Whereas the Corps of Engineers has at this late date notified this board and the county of Richardson of the State of Nebraska that it will not fulfill its commitment to raise and modify the highway bridges aforementioned, although that fact was known to the Corps of Engineers as early as the month of April

1949, prior to the time that this board had obtained any right-of-way for said levee unit No. 513–512R; and

Whereas this board is of the opinion that the Corps of Engineers has breached its agreement entered into by this board in good faith and in reliance upon the plans so submitted to it: Now, therefore, be it

Resolved, That this board refuse to accept any part or portion of the levees constructed in connection with levee unit 513–512R until such time as the highway bridges have been raised and modified in accordance with the original plans submitted to this board; and be it further

Resolved, That the chairman of this board refuse to accept delivery of the documents mentioned in a certain letter from the district office of the Corps of Engineers at Kansas City, Mo., dated March 16, 1951, and addressed to the chairman of this board, copy of which letter was forwarded to the attorney for this board by the Corps of Engineers, and that the chairman of this board cause the return of said original letter by the postal authorities to the Corps of Engineers with the notation that acceptance of the same was refused; and be it further

Resolved, That two copies of this resolution be forwarded to the district office of the Corps of Engineers at Kansas City, Mo., and that single copies of this resolution be forwarded to the commanding officer of the Corps of Engineers at Washington, D. C., United States Senator Hugh Butler, of Nebraska, United States Senator Kenneth S. Wherry, of Nebraska, and Congressman Carl T. Curtis, of Nebraska.

Dated March 19, 1951.

H. C. ZOELLER, *Chairman.*
E. H. TOWLE, *Secretary.*
E. R. FOURAKER.
E. R. DOWELL.
L. M. WEAVER.

EXHIBIT No. 7

FALLS CITY, NEBR.

In re levee project 513–512R

DISTRICT ENGINEER,
Corps of Engineers, Department of the Army,
Kansas City, Mo.

DEAR SIR: This will acknowledge receipt of a carbon copy of your letter addressed to Mr. Ben C. Dale, county engineer of Richardson County, Nebr., under date of March 6, 1951, and of a copy of your letter addressed to Mr. Henry C. Zoeller, of drainage district No. 1 of Richardson County, Nebr., under the date of March 16, 1951.

For your information, the board of supervisors of drainage district No. 1 takes the position that so far as it was concerned, the raising to the bridge at the mouth of the Nemaha River and the raising of the Randolph bridge were part of its agreement with the Army engineers for the construction of the levee project above numbered and that until such time as the bridge matter has been ironed out to the satisfaction of drainage district No. 1 and Richardson County, Nebr., no part of the levee project will be accepted. The board does not propose to accept the project piecemeal.

The board of drainage district No. 1, on March 19, 1951, passed a resolution setting forth its attitude in the matter and two copies of that resolution are enclosed herewith for your information.

Very truly yours,

ARCHIBALD J. WEAVER.

EXHIBIT No. 8

FALLS CITY, NEBR., *March 21, 1951.*

Maj. Gen. LEWIS PICK,
Chief of Army Engineers, Washington, D. C.

DEAR GENERAL PICK: For your information, I am enclosing herewith a copy of a resolution passed by the board of supervisors of drainage district No. 1 of Richardson County, Nebr., on March 19, 1951.

Very truly yours,

ARCHIBALD J. WEAVER.

EXHIBIT No. 9

CORPS OF ENGINEERS,
OFFICE OF THE DISTRICT ENGINEER,
Kansas City, Mo., April 4, 1951.

Mr. ARCHIBALD J. WEAVER,
Falls City, Nebr.

DEAR MR. WEAVER: Receipt is acknwoledged of your letter of March 19, 1951, with a copy of the resolution adopted by the board of supervisors of drainage district No. 1 of Richardson County, Nebr., relative to acceptance to the levee project included in Missouri River agricultural levee unit No. 513-512R.

As you will recall, the bridge revisions involved in the subject project were recognized as being of major importance during initial planning stages both by local interests and my office. In an effort to facilitate completion of the project planning, a number of conferences were held which resulted in tentative agreements for the Federal Government to assume certain costs for bridge revisions as a basis for planning. These tentative agreements were based on the best information available at that time, but subsequent careful examinations of all applicable legislation and authorities resulted in a decision that such costs should be considered as a local-sponsor responsibility. In view of the magnitude of the problem and nature of comments thereon by representatives of this office, the position of the board of supervisors is understandable; however, further review of the present interpretation of existing legislation and authorization is unlikely to result in modifying this decision. Nevertheless, there are other aspects of the problem which have been presented to higher authority with a request that some provision be formulated to relieve the current difficulty.

Wtih respect to the refusal of the board of supervisors to accept the completed portions of the levees and outlet works for maintenance and operation in accordance wtih the assurances furnished prior to initiation of construction, I feel that two important matters are involved.

First, acceptance of the completed portion of the project is definitely in accordance with agreements as to local cooperation required for Federal expenditures on the project. Federal costs, not excluding the bridge phase of the project, have amounted to about $1,400,000 to date, which in itself is prime evidence of good faith. I believe that the board should carefully reconsider their resolution in the light of meeting their legal and moral obligations.

Second, and of paramount importance, the Board's refusal to operate the completed levee and outlet structures exposes the leveed area to a very serious flood threat. This present condition of grave danger of flood disaster would be further aggravated by failure to inspect the levee and appurtenances during or prior to flood occurrences. These considerations are of principal concern to the people residing within the leveed areas, and the Board should carefully consider the very possible result of refusing to operate the project, especially in the light of its responsibility to that group for providing adequate flood protection.

Revision of the expressed attitude of the Board and acceptance of the completed sections of the project will in no way whatever jeopardize any alleged rights with respect to Federal participation in the highway bridge revisions. I will appreciate your reconsideration of these matters and assistance in obtaining the cooperation of the Board toward acceptance of its responsibility to operate and maintain the completed portions of the project for, in the final analysis, the primary objectives of the Board and my office are unified toward providing adequate flood protection for the levee unit.

Sincerely yours,

L. J. LINCOLN,
Colonel, Corps of Engineers, District Engineer.

EXHIBIT No. 10

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, D. C., April 9, 1951.

Mr. ARCHIBALD J. WEAVER,
Falls City, Nebr.

DEAR MR. WEAVER: Your letter of March 21, 1951, addressed to Maj. Gen. Lewis A. Pick, Chief of Army Engineers, and enclosing a copy of a resolution passed by

the Board of Supervisors of Drainage District No. 1 of Richardson County, Nebr., on March 19, 1951, has been received.

I note that two copies of this resolution have been forwarded to the district office of the Corps of Engineers at Kansas City, Mo., the office directly in charge of the project. Under normal procedure that office will initiate action in this matter.

Sincerely yours,

C. H. CHORPENING,
Brigadier General, USA,
Assistant Chief of Engineers for Civil Works.

EXHIBIT No. 11

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington 25, D. C., May 14, 1951.

MR. ARCHIBALD J. WEAVER,
Falls City, Nebr.

DEAR MR. WEAVER: Further reference is made to your letter of March 21, 1951, concerning the controversy in connection with levee unit 513–512R of the Missouri River agricultural levees.

Congress, in the Flood Control Act approved December 22, 1944, expanded the comprehensive plan for flood control and other purposes in the Missouri River Basin to provide for the construction of a system of reservoirs including reservoirs on the main stem of the Missouri River and a system of levees along both banks of the Missouri River extending from Sioux City, Iowa, to the mouth of the river in accordance with recommendations of the Chief of Engineers as contained in House Document No. 475, 78th Congress, 2d session. The levee system recommended in that document an expansion of the levee system authorized by the Congress in the Flood Control Act of 1941.

House Document No. 475, 78th Congress, 2d session, recommends construction of the levee system subject to the conditions that local interests provide without cost to the United States all land easements and rights-of-way necessary for construction of levee units and pertinent works and maintain the levee units and pertinent works after completion. Since the right-of-way for levee construction cannot be furnished without adjustment of utilities and highways located thereon, it is an established principle that the furnishing of such rights-of-way include the adjustment of all utilities and other facilities located thereon unless otherwise specifically provided for in the basic report. A careful review of the basic report and its supporting papers has shown that no exception was contemplated in the case of the Missouri River agricultural levees and it is, therefore, evident that the intention of the report was to place the cost of all modifications to highways and highway bridges on local interests.

It is the usual policy of the Corps of Engineers to provide that raising and underpinning of highway bridges across tributary streams be accomplished at Government expense. Accordingly, upon initiation of detailed plans for levee unit 513–512R, this criterion was followed even though, as noted above, the authorization based on House Document No. 475, which did not follow his criterion, was to the contrary effect. Upon receipt in this office of the detailed plans for the project, our district engineer at Kansas City was informed that the Corps of Engineers had no authority to undertake the raising and underpinning of highway bridges at Government expense. It is regretable that this review and subsequent correspondence on this subject required such a length of time that local interests were not advised of the adverse decision at an earlier date; however, I am firmly of the opinion that the existing authorization for the Missouri River agricultural levees does not include authority to expend Federal funds for the raising and underpinning of highway bridges across tributary streams as proposed for unit 513–512R.

Sincerely yours,

C. H. CHORPENING,
Brigadier General, USA, Assistant Chief of Engineers for Civil Works.

EXHIBIT No. 12

CORPS OF ENGINEERS,
OFFICE OF THE DISTRICT ENGINEER,
KANSAS CITY DISTRICT,
Kansas City 8, Mo., March 6, 1953.

MR. ARCHIBALD J. WEAVER,
Attorney, Drainage District No. 1,
Richardson County, Nebr., Falls City, Nebr.

DEAR MR. WEAVER: You will of course recall our conference on February 13, 1953, to discuss further the matter of highway bridge construction and alterations for levee unit 512–513–L. In order that the record may be complete, I believe that a summary of the items discussed at the meeting would be desirable.

The chief purpose of the conference was to reaffirm the present desires of local interests as to highway bridge alterations and construction so that higher authority may further review the problems involved with up-to-date information at hand. My understanding of the desired bridge work is as follows:

(*a*) Construction of a new bridge over the Nemaha River near the mouth, to replace the former bridge destroyed by the 1951 flood. The request specifies that the new bridge be designed for H–20 loading and provide a 22-foot roadway. It was requested that the total cost be borne by the Federal Government except approach fills to be constructed by local interests at an estimated cost of $30,500 (exclusive of engineering and contingencies).

(*b*) Alterations to a bridge 2.5 miles southwest of Rulo over the Nemaha River. The local district has raised the truss span and provided two I-beam approach spans on each end. The unit sponsor requested that the present I-beam approach spans be raised to the height of the main truss and that three additional approach spans be provided at each end of the bridge. This and construction of approach embankments are requested at Federal cost.

(*c*) No additional modifications of the bridge over Roys Creek at the Missouri-Kansas State line were requested.

In order that higher authority may be immediately familiar with the desires of local interests as outlined above, I have already furnished to them the above data, together with related information. In the event that the requests as stated above do not represent accurately the desires of local interests, I would appreciate early advice so that I may amend my letter. I am sending a copy of this letter to Mr. Reavis and Mr. Dale.

Sincerely yours,

L. J. LINCOLN,
Colonel, Corps of Engineers, District Engineer.

STATEMENT OF HON. WILLIAM H. AVERY OF KANSAS

H. R. 4702 and its companion bill, S. 1358, authorizes modification of the flood-control project for Missouri River Agricultural Levee Unit 513–512–R, Richardson County, Nebr., to include Federal participation in certain highway bridge relocation and construction over the Nemaha River in southeast Nebraska.

My interest in this legislation is more than perfunctory. Several of the counties in my Congressional District adjoin Richardson County, Nebr., and were served by a bridge near the mouth of the Nemaha River which was destroyed by the flood of 1951. The Federal Government, represented by the Corps of Army Engineers, assumed liability for loss of the bridge because of incomplete work on protective levees which contributed to the flood damage, but the fact remains no replacement structure has been erected. Meanwhile, thousands of persons in sizable areas of Kansas, Nebraska, and Missouri are experiencing marked transportation difficulties as a result of the inaction of the responsible agencies.

As I have pointed out, this is not a local matter. The public welfare demands the restoration of this vital transportation link. In the event of national emergency, this traffic artery would be an invaluable asset to civil defense evacuation and the movement of military supplies and equipment.

Under date of March 9, 1955, I received a letter from Mr. Leslie R. Thomson, of White Cloud, Kans., former state representative from Doniphan County, and I quote a paragraph from that letter: "I am glad you are taking an active interest in this bill as it is not only of vital concern to the people of Richardson County,

but will benefit all of northeast Kansas and could be a real asset in case of a national emergency."

Importance of the bridge project to my home State is evidenced by the fact the Kansas Highway Commission already has blacktopped Highway 7 north and west from White Cloud to the Nebraska-Kansas line as a token of good faith and is prepared to raise the roadbed to make it a high-water road and a major State highway. Kansas Highway No. 7 is an important State highway which begins at the Nebraska line and continues south through Troy and Atchison the length of the State. However, northbound traffic on this fine road is disrupted at the Nemaha River because of the missing bridge.

It is my understanding the Corps of Army Engineers has given its approval to he legislation in question.

I sincerely hope that this committee will give favorable consideration to this vital project.

Mr. DEMPSEY. How about hearing from the Army engineers to see what they have to say about the bill?

You have no other witnesses?

Mr. WEAVER. No, sir, I have no other witnesses.

STATEMENT OF COL. HOWARD W. PENNEY, CORPS OF ENGINEERS, UNITED STATES ARMY—Resumed

Colonel PENNEY. Mr. Chairman, the Department of the Army has no objection to this bill as passed by the Senate which provides for the construction of a new bridge near the mouth of the Nemaha River, exclusive of approaches to be provided by local interests, to replace a structure that was destroyed by a flood of 1951, the bridge to be approximately 300 feet long with a 22-foot roadway, at an estimated Federal cost of $163,500.

Mr. MACK. I move the subcommittee report the bill favorably to the full committee.

Mr. BALDWIN. Second.

Mr. DEMPSEY. Any objection?

(No response.)

Mr. BALDWIN. So ordered.

Next we will hear the Michigan project, Document 346. We would like to hear from Mr. Bentley.

SAGINAW RIVER, MICH. (H. DOC. 346, 84TH CONG.)

STATEMENT OF HON. ALVIN M. BENTLEY, A MEMBER IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. BENTLEY. Thank you, Mr. Chairman.

Mr. Chairman and members of the subcommittee, this is a flood-control project for the Saginaw River Basin in east central Michigan, comprising approximately 6,260 square miles. There is at the present time no existing project. This report has been authorized as early as 1946. It provides for various protective works on the Saginaw River and its tributaries, and I believe the committee has the estimated costs, both Federal and non-Federal.

Mr. Chairman, I have here a prepared statement which I am not going to take the committee's time to read. I will submit it for the record with your permission. But I would like to say 1 or 2 words about the present situation there.

We have had, throughout central Michigan, at this time of year, very unseasonable spring rains, tremendous spring rains. Three days ago, on Sunday, I flew over the entire area with a couple of photographers taking pictures, and I was wondering if the committee would be prepared to accept or would be able to accept as exhibits some of the photographs which I have here at the present time. I don't know if it is possible to introduce them into evidence or not.

Mr. DEMPSEY. We would be very glad if you would leave them with the committee.

(The photographs referred to will be found in the files of the subcommittee.)

Mr. BENTLEY. The pictures the clerk has were all taken, as I say, last Sunday, and they show the heavy extent of the flood damage throughout the Saginaw Basin as well as in the city of Flint, which, of course, also at the same time, had the misfortune to be hit by a tornado just the night before the picture was taken.

This one picture, which is the only one I will show, refers to the Shiawassee Flats area, taken approximately 3 years ago. This is what we might call a natural storage basin. At the present time the entire area, here shown, is under water. You can't see a bit of land or anything else.

I also offer that in evidence if I may, Mr. Clerk.

(The photograph referred to will be found in the files of the subcommittee.)

Mr. BENTLEY. Now, we have witnesses, Mr. Chairman, not only from the engineers but also from the community, particularly from Saginaw, who are going to speak both for and against this particular project. It has been rather controversial. There has been some feeling that the proportionate cost borne by Saginaw County is too high. There has been some feeling that the project brought forth by the engineers is unworkable and will stimulate flood problems rather than alleviate them.

But I think at the present time, and in the absence of any alternative project that has at least gone to the extent this has gone and that has the approval of the corps that this has, I must register support of this particular project.

I may say that only this morning I received an individual poll from the board of supervisors of Saginaw County, which is the county, of course, most directly affected both from a cost standpoint and also an effect standpoint, with regard to the flood-control project, and the board of supervisors went on record in the ratio of approximately 3 to 1 in favor of the flood-control project. Their exact voting figures are contained in this statement which I have here.

I believe, Mr. Chairman, that is all I care to say at the present time, I know the witnesses which the committee is going to hear will present the arguments in this case with a great deal of care, because it is something that is a project that has been considered for a great many years, and I know the witneses, as I say, will be able to present the details.

However, if you or any members of the subcommittee have any questions, I would be very happy to try to answer them.

Mr. BALDWIN. Mr. Chairman, I have one question.

Mr. Bentley, I notice this non-Federal contribution varies on the various phases of the project. In the case of the South Branch of the

Sanilac Flats it is $754,000 as compared with a Federal contribution of $892,000, which is almost a 50–50 breakdown. In other cases it is 33⅓ percent or 25 percent, or thereabouts.

Can you give me an idea as to how those funds are proposed to be raised by the area involved?

Mr. BENTLEY. Frankly, in this particular case I can't, Mr. Baldwin. I should explain this covers not only my own congressional district but also in this particular case the 7th Congressional District and also the 10th and the 6th Congressional Districts in the State of Michigan. The reason I am testifying is because Saginaw, in my district, is right in the middle of this thing.

But with respect to how the local costs are to be raised in the Sanilac area, I can't testify on that. I do think, however, there is a representative from Lapeer County, which is over that way, and I believe he will be able to probably testify on that particular subject.

Mr. BALDWIN. Now, are there funds to be raised within your district also?

Mr. BENTLEY. There are funds to be raised within my district also.

Mr. BALDWIN. How are those going to be raised?

Mr. BENTLEY. I should say that in the case of Frankenmuth, which has non-Federal expenses of $33,500, they have already completed practically all of their work, their diking.

Mr. BALDWIN. I see.

Mr. BENTLEY. Now with respect to the Corunna, the Owosso and the Shiawassee Flats areas, which are also in my district, I am not sure that the method of how the non-Federal funds are to be raised has yet been determined.

Mr. BALDWIN. I see. Thank you.

Mr. MACK. Mr. Bentley, if these land enhancement values require local payments that are so large, can you tell us what the nature of these enhancement values is, such as at South Branch where it is 50–50 practically? Is it city property or rural property that is involved or what?

Mr. BENTLEY. Again, Mr. Mack, I will have to plead ignorance on that particular topic, because that is well outside my district. I think, however, you will have witnesses that will be able to comment on the Sanilac project.

Mr. DEMPSEY. Thank you very much.

Mr. BENTLEY. Thank you, Mr. Chairman.

(The prepared statement of Mr. Bentley follows:)

STATEMENT OF HON. ALVIN M. BENTLEY, MEMBER OF CONGRESS FROM THE STATE OF MICHIGAN

It is a pleasure to appear before the Subcommittee on Flood Control of the Committee on Public Works and explain some of the background of the flood control survey report on Saginaw River, Mich., which is now being considered by this committee for possible inclusion in this year's omnibus public-works bill.

According to a calendar prepared by one of the project's sponsors, the Saginaw Valley Regional Planning Commission, this vast program had its inception back in 1920, when a report on floods in Saginaw County was prepared by Professors Wisler and King of the University of Michigan. If I might, I would like to give the committee a brief résumé of the historical background leading up to the presentation of the report now before it.

I. HISTORY OF ATTEMPTS TO BRING ORGANIZED FLOOD-CONTROL PROGRAM TO SAGINAW VALLEY

In 1931 an unfavorable preliminary examination report on the Chippewa and Tittabawassee Rivers was submitted by the Detroit district engineer and concurred in by the higher authorities. Then in July 1937 Congress authorized the first Corps of Engineers survey report at Saginaw and vicinity. This was also unfavorable when submitted by the Detroit district engineer in May 1941 and latter transmitted to Congress in February 1943. In 1941 the first attempts were made at local organization for flood prevention. In that year, the Saginaw County drain commissioner attempted to organize a valleywide drainage district, but he failed to receive support from a majority of the counties in the river basin area affected. However, efforts persisted, and in May 1942 the Flint and Shiawassee River Drainage Districts were organized. In January 1944 the first water conservation conference was held in Michigan and a Michigan planning commission advisory committee was appointed to study Michigan water law and problems. This committee's report led to the appointment of interim committees of the State legislature on water resources, creation of the Michigan Water Resources Commission, and water management district enabling legislation. In December 1944 the first Saginaw Valley conference on water problems was held in Saginaw, leading to the appointment by the Governor in January 1945 of the Saginaw Valley flood-control committee, the forerunner of the present planning commission. In October 1945 the first Saginaw Valley flood-control plan was prepared by the Saginaw Valley committee and submitted to the Flint and Shiawassee Drainage Districts, and although found necessary, it was stalled due to lack of valleywide support. The actual beginnings of the report presently before this committee were in April 1946 when the House Flood Control Subcommittee adopted a resolution calling for a review report by the Corps of Engineers to determine the feasibility of improving the Saginaw River for flood control and other purposes. In May 1946 the second Saginaw Valley conference on water problems was held in Midland, from which came the recommendation for State-enabling legislation and the creation of the Saginaw Valley Regional Planning Commission. After passage of enabling legislation that same month, the planning commission was created and its members appointed by the Governor in November 1946. The Corps of Engineers conducted a public hearing in Saginaw in June 1947 and completed the preliminary examination and report for the flood-control plan, which was approved by the Board of Engineers for Rivers and Harbors in October 1948 and a detailed survey report was ordered by the Chief of Engineers. This report was completed and approved in the district and regional engineers offices by January 1954 and transmitted to the Board of Engineers for Rivers and Harbors where it was approved on April 30, 1954. The Chief of Engineers forwarded it with his approval to the Secretary of the Army on April 11, 1955, and the Secretary submitted it to Congress with certain suggested authorizing language to be included in the omnibus bill on February 7, 1956. Thus we see that it has taken 25 years of almost continuous effort to bring a favorable engineers' survey report before Congress for consideration.

II. HISTORY OF FLOODS IN SAGINAW VALLEY AND SAGINAW RIVER BASIN

The program has been deemed necessary by its proponents to provide controls for the almost annual spring floods which occur in the Saginaw Valley and cause property damage to farms, cities, and villages along the banks of the Saginaw River and its tributaries. These floods are seldom spectacular, and loss of life is extremely rare. The two most serious floods to hit the area were in 1904 and 1947, although there has been some property damage of consequence to urban and agricultural property almost every spring. In fact, a very serious flood has swept over the Saginaw Valley during the past 2 weeks and it is still too early to estimate the extent of damage it has caused and is continuing to cause.

According to information published by the Saginaw Valley Regional Planning Commission, which has done considerable research on this project, the flat, fertile soils of the Saginaw Valley were formed as bottom deposits in a glacial lake about 10,000 or 11,000 years ago. During early stages of the glacial lake, drainage from it was to the west through the system now known as the Grand River system. However, further retreat of the ice, lowering of the lake level, and the opening of a new outlet to the east reversed the drainage from west to east. The rivers now known as the Cass, Flint, Shiawassee, and Tittabawassee then flowed as independent streams into the glacial lake. When the lake con-

tinued to retreat eastward to the present Saginaw Bay, these rivers moved with it, eventually uniting to form the Saginaw River. Thus we have a condition where the main stream is very much younger than its tributaries. Although the Saginaw River is only 20 or so miles long, when united with its tributaries it forms the largest drainage system in the State of Michigan.

The information furnished by the commission relates that deforestation and cultural development, combined with the low infiltration rates of the soil, contribute heavily to runoff. Due to the narrow channel and flat grade of the Saginaw River, its channel is inadequate to prevent flooding during periods of high runoff. I might take this opportunity to parenthetically point out to the committee that Public Law 780, 83d Congress, authorized navigational improvements along the Saginaw River from its entrance on Saginaw Bay to the Sixth Street Bridge in the city of Saginaw. This plan includes a new entrance channel 24 feet deep and 9½ miles long, deepening of the present channel to 24 feet up to Bay City and then to a depth of 22 feet into Saginaw. This will deepen the channel 3 additional feet from its present authorized depth from the bay entrance to Bay City, and deepen it 2 additional feet from Bay City to the Sixth Street Bridge in Saginaw. However, the Sixth Street Bridge is approximately 10 or 15 miles from the downriver areas which have suffered from floods most severely during the spring months, and I do not know whether this deepening of the river, primarily to aid navigation, will have any effect on alleviation of flooded areas, especially south of the Sixth Street Bridge in Saginaw. This project is now in the process of being considered for advance planning funds before the House Appropriations Committee. It is believed that the proposed flood-control program may serve to reduce the vast amounts of silt which accumulate in the Saginaw River during periods of high water. This in turn should alleviate the need for continual navigational dredging and complement the navigation project now under authorization.

Although I mentioned only 1904 and 1947, records show that flooding occurred at one or more places in the area to be affected by this program at least 30 times between 1873, when the maintenance of records began, and the present time, including the past 3 springs. Of the more than 30 floods, 25 have occurred since 1900. In the city of Flint, in Genesee County, the third largest city in the State, damage was estimated at $3,801,490 in April of 1947, when the water swept into the downtown business district. Over in Sanilac County, at the eastern end of the river basin area, the average estimated annual loss of farm production has been $1,089,000, and during the flood of 1953, the loss was estimated at $1,500,000. The figures quoted here were taken from a 1954 publication of the Saginaw Valley Regional Planning Commission which I have with me and which the committee may have if it wishes to examine it. I imagine it may wish to question the commission's spokesman later concerning the figures and statistics presented therein when his testimony is delivered. I also have information from the editor of the St. Charles Union, in the community of St. Charles in Saginaw County, that the property damage in that area amounted to $1,112,000 in 1948, which was another severe spring.

This spring, the worst since 1948, the Saginaw Valley has experienced two damaging floods. The first, which hit mainly in the Frankenmuth area, occurred during the usual period of the spring breakup, and therefore did no extensive crop damage, although some business establishments in downtown Frankenmuth were under several feet of water.

However, the flood of the last 2 weeks has hit the valley during spring planting and its persistence may well prove disastrous to hundreds of farmers who had already planted their sugar beets, wheat, barley, and oats. Though it is still too early to give a firm estimate, it is expected that crop losses may run into the hundreds of thousands of dollars.

I have asked the Farmers' Home Administration to make emregency loans to farmers in the central Michigan area, including the Eighth Congressional District, who have suffered crop losses due to the present flood. High water has also caused serious traffic problems. Main roads directly south of Saginaw have been blocked by the swollen Cass and Flint Rivers. The Flint River has been threatening the rich cropland known as big prairie farms, and the nearby little prairie farms area has been seriously inundated by the collapse of locally constructed dikes. A large area along the Shiawassee River between Chesaning and St. Charles is under water. Several areas of Chesaning and St. Charles proper have been submerged under several feet of water during the past 10 days by the steady rains. Several areas in downtown Flint, in Genesee County, have been under water.

The unusual feature of this flood is its timing: normally, high water is expected in March when no crops are planted, and the land is usually dry enough to plant by the first of May. But this mid-May flood has not only washed out some crops which were already planted, it is delaying further planting far beyond the normal period. This has raised the possibility of much lesser yields on those crops not yet planted, in addition to the destruction of the crops in the ground before the flood hit. Dikes around the reclaimed lowlands of Saginaw County crumbled early last week and tons of water poured over the area. The water swirled 4 feet or more deep over newly planted sugar beets, barley, oats, spring wheat, as well as growing, fall-planted wheat. The sugar beets are feared lost and it is believed that much of the oats and barley will probably be destroyed. It is still too early to tell whether the wheat can be saved. Farmers face the grim likelihood of not being able to plant any more crops this year in parts of this area.

III. SHIAWASSEE FLATS CONTROVERSY

There is no need to spend the committee's time reciting the specific projects listed and described in the report, or to present the various costs for each project, which are set forth in extensive detail. I would, however, like to call the committee's attention to the largest single project in the plan, the Shiawassee Flats flood control and wildlife conservation program, which will require the joint cooperation of the Army Corps of Engineers, the Fish and Wildlife Service of the Department of the Interior and the Michigan Department of Conservation. This project involves approximately 22,000 acres of river swamp and high-risk farmland in Saginaw County.

In the letter of transmittal from the Secretary of the Army, special mention is made regarding the allocation of costs for this unit, and a suggestion that this special allocation plan be incorporated in the language of the authorizing legislation. This complicated, dual-purpose project has been the source of considerable controversy between the supporters of the flood-control plans and some of the township governments in the Shiawassee Flats area, especially those in James and Swan Creek Townships of Saginaw County. This group has a spokesman present at this hearing and is prepared to present testimony in opposition to the Shiawassee Flats project. As I understand it, the basis for their opposition rests in the belief that local spillage from the storage basins will impair or destroy the productivity of their land, or increase their drainage expenses to such a degree that they will be forced to sell their property. They are also objecting to the loss of tax money available for local governmental expenses such as schools and roads by the sale of the refuge land to the Federal Government. They believe that the proposed area for wildlife refuge should be reduced from the planned 22,000 acres to around 4,000 acres. You will notice that the survey report recommends that one-half of these particular lands be furnished by local interests and one-half by the United States, and that the Fish and Wildlife Service and the State of Michigan have already acquired some of this land. The engineers report recommends expenditure of $1,568,000 for the acquisition of approximately 15,680 acres in the Shiawassee Flats area by the Fish and Wildlife Service. A cooperative agreement between the United States Fish and Wildlife Service and the Michigan Department of Conservation covering the acquisition, operation and maintenance of this joint project was signed in July 1955. At the present time, between 35 and 40 percent of the land within the wildlife project boundary, which corresponds roughly to the area proposed for the storage of floodwaters, has been acquired by the two wildlife agencies. The cooperative agreement contains a declaration of intention to cooperate with the entire flood-control program.

It is my understanding with respect to the loss of taxes for local schools and roads, that county governments are entitled to payments in lieu of taxes from the Federal Government to make up for the loss through purchase by the Federal Government. By act of Congress of June 15, 1935 (49 Stat. 383, sec. 401; 16 U. S. C. 715s), the Federal Government is directed to make such payments to county governments; however, there is no provision whereby direct payments may be received by the townships for loss of taxes, and I imagine it would be necessary to accomplish this through local negotiations with the county government.

On the other hand, it is my understanding that existing law provides that 25 percent of all proceeds from the sale of surplus refuge products goes back to the

local townships for schools and roads. Such income comes from pasture rental fees, sale of surplus crops, timber, furs, concession fees, minerals, and other products of the area not usable by wildlife. The Fish and Wildlife Service states that through the years it has been found that the tax returns to the local government by this method often equal, and in some instances exceed, what came to them when the lands were privately owned and subject to local taxation. It is the Fish and Wildlife Service's plan that the agricultural lands be sharecropped, with the local or standard percentage of the yield going to the Federal Government for feeding waterfowl, the cooperating farmer then selling his share as he wishes. I will leave further details on these matters to the spokesmen for the groups represented at this hearing, both in support and in opposition to the flood control plan, particularly the Shiawassee Flats project.

I have received letters in support of the flood-control program from Mr. C. A. Miller, city manager of Saginaw, on behalf of the city of Saginaw which has passed two resolutions endorsing the project; from Mr. Frank B. Niederstadt, city clerk and chairman of the Saginaw County Board of Supervisors, which enclosed a copy of the city council's first endorsing resolution dated September 7, 1954 (on April 30, 1956, the Saginaw City Council conditionally endorsed appropriations for the flood-control program provided that local assessments do not later prove too disproportionate to the direct benefits to be derived by the city itself); from Mr. L. B. Harkins, executive vice president of Harwill, Inc., a boat manufacturing firm in St. Charles; from Mr. Frank H. Watson, publisher of the St. Charles Union, St. Charles; several communications during the past 3 years from Mr. Phelps Vogelsang, chairman, Mr. William Dennison, treasurer, and Mr. Gale Gibson, formerly executive secretary of the Saginaw Valley Planning Commission; Mr. H. L. Keinath, superintendent of public works, village of Frankenmuth; from Mr. Jay S. Larner, supervisor for Chesaning Township in Saginaw County; from Mr. William H. M. Gould of the Hartley Lumber Co., St. Charles; from Dr. V. K. Volk, county health commissioner of Saginaw County; and from Mr. Gerald E. Eddy, director of the Michigan Department of Conservation, which is cooperating in the development of the Shiawassee Flats project, mentioned earlier. I also have letters expressing interest in and indicating a desire to be of assistance with the presentation of this program from Mr. Holly E. Hubbell, State representative from rural Saginaw County and chairman of the drainage committee of the Michigan House of Representatives; and from Mr. Milton P. Adams, executive secretary of the Michigan Water Resources Commission on behalf of that body. I am in possession of a copy of the remarks prepared and delivered by Claude Stewart, vice chairman of the Saginaw Valley Regional Planning Commission and vice president of the State association of county drain commissioners at a meeting with the Saginaw County Board of Supervisors on April 22, 1955, in support of the project and discussing some of the misunderstandings which have caused the Saginaw County Board of Supervisors to refrain from endorsing this project as a unit, although the chairman and some individual members have expressed their support. I also have a letter from Mr. Albert C. Boyd, dated December 18, 1953, who was then manager of the Saginaw Chamber of Commerce, stating that that organization did not approve of the flood-control program in 1951, and had not changed their position since then. However, I am uncertain as to the official position of this group today, and am inclined to believe that it would not oppose the project if called upon to go on record.

I am in possession of copies of resolutions, in addition to Saginaw, from the city of Corunna, in Shiawassee County, the village of Frankenmuth, Saginaw County, the city of Owosso in Shiawassee County, the city of Flint in Genesee County, city of Midland in Midland County, city of Vassar in Tuscola County, the county board of supervisors of Sanilac County, and the Cass River drainage committee of Sanilac County, all in support of the project. The Michigan Legislature's Joint Interim Study Committee on Water Resources also endorsed the plan on March 24, 1954. At a meeting of the Saginaw Valley Regional Planning Commission held at Frankenmuth on March 19, 1954, and attended by members of the Commission, State and local public officials and residents of Saginaw Valley, a resolution in support of the project was adopted by a vote of 173 to 15, with 14 persons not voting. A list of those present and their position on the resolution was presented to me, and is available. There are also copies of resolutions in my files supporting the project adopted March 20, 1954 by the Genesee Soil Conservation District and on June 15, 1952 by the State convention of the Michigan united conservation clubs. I also have petitions signed

early this year by 180 residents of St. Charles, urging my active support of the flood-control plan.

During the past week I have received telegrams from local businesses, organizations and individuals in St. Charles, including the St. Charles Boat Club, the St. Charles Gun Club, St. Charles Lions Club, Harwill, Inc., stating that all of their employees were polled in support of the project. Mr. Aldo Hulein, and Mr. Earl B. Clark.

C. K. Colby, the Shiawassee County Drain Commissioner, has addressed a letter to the committee and forwarded it through me requesting the committee's approval of the project.

In a poll of the Saginaw County Board of Supervisors conducted during the past week, I understand that 34 members have expressed their approval of the project, 11 members have expressed their disapproval, one member has registered neutrality and three have expressed no opinion.

I am also in receipt of letters opposing the plan, particularly the Shiawassee flats flood control and wildlife project from Mr. Herbert J. Dietrich, Saginaw County Drain Commissioner, who is present at this hearing, Mr. Nicholas G. Benkert, chairman of the Swan Creek-James Township Farm Bureau, and Mrs. Eleanor C. Hart of Swan Creek township, who has submitted a petition signed by approximately 500 persons from Saginaw County, particularly the Shiawassee flats area, stating their opposition to the plan. I have received a letter from Mrs. Ethel N. Fuller, secretary of the Saginaw County Farm Bureau, informing me that the Farm Bureau continues its position announced in a resolution adopted by the membership on October 25, 1954, in opposition to the flood-control plan. Copies of all the letters, statements and resolutions mentioned herein will be made available to the members of this committee upon their request.

IV. COST ANALYSIS

The Saginaw County Farm Bureau, in its letter to me dated April 27, 1956, bases its continuing opposition to the project on the belief that Saginaw County will be assessed approximately two-thirds of the project's costs and the remaining 20 counties involved, who the Farm Bureau claims will derive all the benefits, will pay only one-third of the costs. I understand this is also the basis for the opposition by the Shiawassee Flats Agricultural Association, which was reiterated in their meeting on May 3, 1956. As noted before, the Saginaw City Council has endorsed the project conditioned upon local assessments being in proportion to the benefits derived by the city of Saginaw.

In view of this concern over local assessments and the fears that they will prove to be disproportionate to the anticipated benefits, I have examined the cost and benefit figures in the chart on page 5 of the report submitted April 30, 1954, by the Board of Engineers for Rivers and Harbors to the Army Chief of Engineers. Since the Corps of Engineers has allocated Federal and local costs and expected benefits on a project basis rather than a county basis, I have no way of comparing my analysis with that of the Saginaw County Farm Bureau. I understand that their figures, presumably gathered on a county-by-county basis, were taken from a research report prepared about 1947 by Prof. W. C. Hoad of the University of Michigan on a slightly different project. At any rate, by comparing the Engineers allocations of costs on a Federal and local basis, I have come up with some very interesting percentages which I feel certain the committee will wish to consider very carefully.

The chart on page 5 has been modified as shown on the summary sheet which the committee has, to divide the costs at Corunna so that the Federal share is now $26,400 and the non-Federal share is $23,600. This will make the Federal total $14,107,720 and the non-Federal total $3,790,240. The reason for this change, as explained in the report, is that assurances have been received from responsible interests at Corunna that they will bear the costs for the modification of the spillway of the private mill dam there. However, in the interest of clarity and for purposes of illustration, I have based my comparative percentages on the original costs given by the district engineers on page 5, especially since the change at Corunna causes only an insignificant variation in them. However, if the committee wished, I could base my comparison on the revised totals, since that would only tend to prove my point even more conclusively that Saginaw County's share of the cost is not disproportionate to the benefits.

The two Saginaw County projects, Shiawassee Flats and Frankenmuth, will have a total local cost assessment of $2,157,100 ($2,127,700 for Shiawassee and $29,400 for Frankenmuth). However, $784,000 must be deducted from this figure because this amount will be supplied from duck stamp and hunting license revenues collected under the authority of the Robertson-Pittman act. These funds will be collected by the Federal Government and turned over to the State of Michigan, which would presumably apportion them according to the respective needs of local interests concerned. Thus we find that Saginaw County's share of all local costs assigned by the engineers, as those costs pertain to projects located solely within Saginaw County, would actually amount to $1,373,000 or 36.4 percent of $3,767,840, the total of all locally assigned costs for the entire flood-control program. The revised percentage would be 35.9 percent. Bear in mind that other projects listed outside of Saginaw County may possibly reach into the county, such as Midland's Tittabawassee River project. But I have no method for apportioning any possible share of that project's cost to Saginaw County, so I shall have to rely on the project basis devised by the engineers and assume that Saginaw County will be expected to bear the major share of the costs of those projects located within the county, as will the other counties with their respective projects.

Now, the total local non-Federal costs for all other projects located outside Saginaw County is $1,610,740, or 45.4 percent of the total local costs of $3,767,840 (revised percentage is 43 percent). The 18.2 percent balance is the Robertson-Pittman hunting revenues contribution mentioned before (revised balance is 21.1 percent).

Continuing our cost analysis, we find that Saginaw County projects will derive 42.5 percent, or $508,600 from the total of $1,195,100 in anticipated benefits. These include flood control and prevention, improved land values and wildlife preservation. Projects located in other counties will thus derive $686,500, or 57.5 percent of all the expected benefits.

Since Saginaw County's projects will cost $11,191,700, the locally assigned share of $1,373,000 mentioned earlier actually comprises only 12.2 percent of these costs. When you consider that the entire program in all counties will cost $17,897,960, Saginaw County's projects are assessed only 7.6 percent of all these costs, both Federal and non-Federal. An interesting contrast is found in the average percentage contribution allocated to all other counties for the non-Federal share of their respective projects. Since the total is $1,610,740 for other local project costs outside Saginaw County, and the total costs of these projects, both Federal and non-Federal, is $6,706,960, we find that all other counties are expected to foot 24 percent on the average for the projects in their counties. This percentage remains the same under the revised totals.

Continuing further, we discover that Saginaw County's total costs, both Federal and non-Federal, for projects located solely within the county comprise $11,191,700, or 62.5 percent of the total cost of the entire program—$17,897,960. Comparing that with the locally assigned percentage contribution of 7.6 percent for the entire program would, at the very least, seem to indicate that Saginaw County is not being assigned a disproportionate share of the cost of this flood-control program, whether looking at it from a standpoint of local contributions alone, or all costs, both Federal and local. Finally, we find that the Federal cost assigned to Saginaw County projects—$9,034,600, comprises 63.9 percent of the total Federal costs for the entire program, $14,130,120 (revised percentage is 64 percent).

SUMMARY

In view of the obvious need for this program, as evidenced not only by the current devastation in the Saginaw River Basin but also by recurrent spring floods for many years, and since the local, non-Federal share of the allocated costs do not appear to be disproportionate or discriminatory, I would like to register my apprval and support of the Army engineers' report on flood control for the Saginaw River Basin. I respectfully request this subcommittee to recommend inclusion of this project in the omnibus public works authorization legislation which it will present to the full committee. Thank you.

Mr. BENTLEY. I would now like you to hear from Mr. Weinkauff of the Army engineers.

STATEMENT OF HENRY C. C. WEINKAUFF, PLANNING DIVISION, CIVIL WORKS, OFFICE, CHIEF OF ENGINEERS

Mr. WEINKAUFF. Mr. Chairman and members of the committee, this report was authorized by resolution of the House Flood Control Committee in April 1946.

The proposed project is located in east central Michigan. You can see the general outline up here. Saginaw River drains an area of about 6,000 square miles. The population of the basin is in excess of 700,000 people.

It consists essentially of four main tributaries—the Tittabawassee River, the Shiawassee River, the Flint River, and the Cass River.

There is an existing navigation project in the lower river to provide for lake freighters. There is no existing flood-control project for the Saginaw River Basin.

Destructive floods have been a problem in the basin for many years. As an example of the destruction which has been wrought in two previous floods, the floods in 1947 and 1948 caused damages of $5 million and $2,250,000, respectively.

The problem areas, however, can be isolated into eight principal localities, and the plan of improvement as shown in the report provides for works at these localities. They are Midland on the Tittabawassee River, Owosso and Corunna on the Shiawassee River, Flint on the Flint River, Sanilac Flats, Vassar, and Frankenmuth on the Cass River, and at the confluence of the four main tributaries, the Shiawassee Flats.

The work provided for consists generally of channel improvement, flood walls, and levee construction and related items of work. The Shiawassee Flats improvement consists of, in addition to that type of work, three lateral reservoirs to take off the peak flow in times of flood and at other times to channel the flow down into the Great Lakes.

The Shiawassee Flats unit is a dual-purpose improvement, both for flood control and fish and wildlife. And I might mention at this time that the fish and wildlife interest is of national significance. It is on the main duck flyway which extends from the north to the Gulf coast.

The total cost on a current price basis is $20,404,600, of which $16,084,700 is a Federal cost and $4,319,900 is a non-Federal first cost. The non-Federal first cost consists of lands, easements, rights-of-way, bridge and highway alterations, and cash contributions because of land enhancement.

The overall annual benefits amount to $1,965,000. The overall B–C ratio is 1.76, with the individual projects varying from 1.11 to 3.02.

We have a letter from the Governor of Michigan approving the project. The Federal agencies to whom the report was submitted for comment questioned certain details but did not oppose the project as a whole. The Bureau of the Budget advised there was no objection to submission of the report to the Congress, provided that prior to the request for funds a reexamination be made of the justification for the Shiawassee Flats unit and, in addition, that necessary authorizing language be included in the letter of transmittal stating the maximum amount of cost allocated to fish and wildlife purposes by the United States. This matter has been taken care of in the letter transmitting the report to the Congress.

Gentlemen, that completes my formal presentation. I will answer any questions that you may have.

Mr. DEMPSEY. Any questions?

Mr. SCUDDER. Mr. Chairman, I would like to ask a question.

Does the State of Michigan contribute to fish and wildlife benefits from the State treasury? Is that where a part of your local contribution comes in?

Mr. WEINKAUFF. The cost of the land to be purchased in fee for fish and wildlife purposes is divided 50–50—that is, 50 Federal and 50 local. In this case, the State of Michigan's portion for this land which it is now acquiring amounts to $784,000. Now the funds for that purpose are also acquired through the Pittman-Robertson Act, the tax on duck stamps, which goes back into the State and then is funneled out again for this particular purpose.

Mr. SCUDDER. And part of this cost will be borne by the hunters in the area?

Mr. WEINKAUFF. Yes, sir.

Mr. SCUDDER. And it reverts to the State——

Mr. WEINKAUFF. Yes.

Mr. SCUDDER. For participation purposes?

Mr. WEINKAUFF. Yes, sir.

Mr. MACK. On the South Branch project, its shows that the Federal cost will be $892,000, the non-Federal $754,000, or almost 50 percent. What is the nature of the land enhancement values that result in such a demand for such a heavy local contribution?

Mr. WEINKAUFF. The Sanilac Flats is essentially what we term a major drainage project. And the answer to your question is that it consists essentially of land enhancement, although there is other work there—lands, easements, and bridge changes by local interests.

Mr. MACK. You mean at the present time this is a swamp area and it will be reclaimed as a result of this flood control project?

Mr. WEINKAUFF. Well, to some extent it is. But usually the floods are of great duration. When they get in that area, it is low, and they stay there for some 30 or more days, and it is impossible to plant the type of crops that could be planted if an improvement were made and major drainage accomplished.

Mr. MACK. I am not clear as to who pays for the reclaiming of this land for wildlife use. Does the local interest pay for that?

Mr. WEINKAUFF. The wildlife?

Mr. MACK. Yes; the reclamation to make the land suitable as wildlife preserves.

Mr. WEINKAUFF. This is now down in Shiawassee Flats. That is partially paid for by the Federal Government and partially paid for by the State.

Mr. MACK. What percentage would the Federal Government pay?

Mr. WEINKAUFF. Well, the percentage allocated to wildlife as far as the lands to be purchased in fee are concerned, which amounts to a total of $1,568,000, is 50 percent of the lands. Then, in addition, the Federal Government pays for certain easement and building removal costs allocated to fish and wildlife. The total Federal costs, easements, and building removal is $902,000, and the non-Federal cost for these category items is $333,800.

Mr. MACK. Are there other instances where the Federal Government handles wildlife benefits in a similar fashion?

Mr. WEINKAUFF. We in our studies tried to determine the extent of national significance, and it is based upon that, that the division of cost is made. And in some instances we require a local interest to pay the entire cost if it is incidental to an improvement and is of local significance.

Mr. ROGERS. Actually, this wildlife is just a byproduct of your plan here; is it not? It is not your major portion? That is not your major plan? Your major plan is for flood control; is it not?

Mr. WEINKAUFF. Well, the prime purpose is for flood control. However, it is a dual-purpose project.

Mr. ROGERS. Well, it brings benefits——

Mr. WEINKAUFF. Yes, sir.

Mr. ROGERS. But your main project is flood control.

Thank you, Mr. Chairman.

Mr. DEMPSEY. Any other questions?

(No response.)

Mr. DEMPSEY. Thank you very much.

The next witness will be Mr. Vogelsang.

STATEMENT OF PHELPS VOGELSANG, SAGINAW, MICH.

Mr. VOGELSANG. Thank you, gentlemen, I represent the Saginaw Valley Regional Planning Commission, which organization was established by statute, State statute. Our job has been to promote the flood-control project for the Saginaw Valley.

Our organization was established 10 years ago. Before that time, for the previous 8 years, we had a study committee studying the possibilities of flood control in the Saginaw Valley.

Our organization is made up of 1 member from each of the 21 counties involved in the watershed of the 5 rivers and 1 member from city of over 5,000 population in the area, so that we have a cross-section representation from every area involved in the watershed.

The program primarily is 1 of 5 separate projects with connecting stream improvement in order to get proper flowage of the rivers which are now so badly silted. And these projects are primarily those of diking in cities to prevent local flood areas such as the city of Flint, where we have had disastrous floods within the last 5 years, the city of Midland, the city of Owosso, the city of Corunna, and the cities of Frankenmuth and Vassar.

At the confluence of the 4 major rivers we have the Shiawassee Flats area, which is an area of some 38,000 acres of farm and swamp land. This area has been a major sugar-beet portion of the Saginaw Valley's crop production, and for several years, of course, we get so many continual floods that come so late, flash floods—and this area always floods—that it makes it most difficult to farm the areas.

The proposal of the Shiawassee Flats is primarily a catch basin made up of three major flood basins where, at various stages of rising of the Saginaw River, gates can be opened to intermittently flood these areas as required in order to protect the city of Saginaw from possible flood.

Along with this, and at a later date, the National Wildlife Service proposed a wildlife area, which is taken over as at least one of these storage areas for a continual supply of water to benefit the duck and goose flyway through Michigan.

Further, in our organization, we have held several meetings and discussed it with farmers and with boards of supervisors, and, if I may, I have testimony that I would like to submit both from the Saginaw area and from all city councils and all boards of supervisors involved in the watershed.

If there are any further questions that I may answer, I would be very glad to do it, sir.

Mr. DEMPSEY. Do you have statements from different people you want to put in? Is that what you desire to place in the record?

Mr. VOGELSANG. I have a letter of approval from the senate of the State of Michigan, from the house of representatives, from the Saginaw County Board of Supervisors, and from the Saginaw City Council, plus various other city councils, that I would like to submit.

Mr. DEMPSEY. Without objection, they will be placed in the record at this point.

(The documents referred to follow:)

GENERAL POINTS ON THE SAGINAW VALLEY FLOOD CONTROL PROJECT

By Representative Holly Hubbell, Chairman of Drainage, Committee in House of Representatives

The project is urgently needed and desired not only for the protection of cities, villages, and farmland now subject to periodic and destructive floods but to permit the development of great new industrial and agricultural values.

A coordinated project is essential because of the valley's peculiar drainage pattern. All the major tributaries come together in the Shiawassee Flats, which constitutes a natural flood basin. Development of that basin to improve its floodwater detention capacity is the key to flood protection and improved drainage for the whole valley. Without it, upstream projects would aggravate the critical situation of Saginaw and Bay City, which lie below the flats.

Until flood protection is developed, all the major towns and much of the valley's rich farmland are in constant danger of severe damage. Michigan rivers are relatively short and hence can develop flood conditions within a very few days at any season of the year.

Resultant damage is not only a matter of property destruction but of injury to the public health and welfare. Transportation and industrial production are interrupted. That is serious enough in peacetime but it could be disastrous if a flood occurred in this great industrial area during the hurried preparation for or prosecution of war, which seems constantly to threaten us.

HOUSE OF REPRESENTATIVES

LANSING, MICH.

GENTLEMEN: We are asking you to join with the representatives of the Michigan State Legislature and your constituents to establish a sound program of water-resource development for the future.

The committee which I represent on drainage affairs covers flood control, drainage, navigation, and pollution. The Saginaw Valley or Shiawassee Basin contains over 6,000 square miles of agricultural territory, 4 large industrial areas (Saginaw, Bay City, Midland, and Flint), and many smaller cities and villages. Michigan is a State rich in water assets, perhaps richer in this respect than any other.

It is necessary that the Saginaw River channel be dredged in order to take care of the shipping by water to our great industrial centers, Bay City and Saginaw. It is also important that dikes be built for flood control so that dredging can be done on outlying tributaries such as the Cass, the Flint, and the Shiawassee as well as the Tittabawassee Rivers in order to allow proper drainage to thousands

of acres of fertile soil, and in so doing will allow the excess waters to be run off in an orderly manner from the diked basins, thus protecting the low area in the Saginaw Valley against floods.

HOLLY HUBBELL.
GEO. DUNN.

Councilman Snyder offered and moved the adoption of the following resolution:

Whereas efforts of the Saginaw Valley Regional Planning Commission to activate a valley flood control program have been halted, after the expenditure of large sums of money, because of failure of various public bodies to appropriate sufficient sums for completion of the project; and

Whereas it is deemed to be in the interests of the city of Saginaw to carry through to completion the efforts of the planning commission in order to secure Federal authorization for the flood control project: Now, therefore, be it

Resolved, That it is the consensus of the council that the authorization of the project is desirable and it is in the public interest to appropriate the necessary funds to complete the studies required therefor.

Adopted unanimously.

STATE OF MICHIGAN, COUNTY OF SAGINAW
Office of the City Clerk, City of Saginaw, ss:

I, Frank B. Niederstadt, clerk of the city of Saginaw, County and State aforesaid, do hereby certify, that I have compared the annexed copy of an excerpt from the minutes of the regular meeting of the council of the city of Saginaw held September 7, 1945, with reference to adoption of a resolution expressing council's concensus of desirability to appropriate funds to complete studies required to continue valley flood control program with the original on file in the office of the city clerk and that it is a true and correct transcript therefrom and of the whole of such original.

In witness whereof, I have hereunto set my hand and affixed the corporate seal of the city at Saginaw, Mich., this 9th day of May 1956.

[SEAL]

F. B. NIEDERSTADT,
City Clerk.

Certificate No. 368

CITY OF SAGINAW, MICH.

Councilman Snyder offered and moved the adoption of the following resolution:

Whereas there is a serious problem of periodic flooding in the Saginaw Valley area with accompanying property damage; and

Whereas a considerable amount of time, effort and money has been expended in planning a program to control these periodic floods and eliminate the damage caused thereby; and

Whereas thousands of acres of land which cannot now be cultivated could be made productive through the carrying out of such a program thereby benefiting many people in the drainage basin of the Saginaw River and its tributaries: Now, therefore, be it

Resolved, That the council of the city of Saginaw hereby urges the Congress of the United States to give approval to and appropriate the necessary funds for the construction of the flood control project of the Saginaw Valley as planned, and be it further

Resolved, That copies of this resolution be sent to the Honorables Charles E. Potter and Patrick V. McNamara, United States Senators, the Honorable Alvin E. Bentley, Representative in Congress, and the chairman of the Public Works Committee of the House of Representatives.

Adopted unanimously.

STATE OF MICHIGAN, COUNTY OF SAGINAW,
Office of the City Clerk, City of Saginaw, ss:

I, Frank B. Niederstadt, clerk of the city of Saginaw, county and State aforesaid, do hereby certify, that I have compared the annexed copy of an excerpt from the minutes of the regular meeting of the council of the city of Saginaw held April 30, 1956, with reference to resolution urging Congress of the United States to give approval to and appropriate necessary funds for construction of flood control project of Saginaw Valley as planned with the original on file in

the office of the city clerk and that it is a true and correct transcript therefrom and of the whole of such original.

In witness whereof, I have hereunto set my hand affixed the corporate seal of the city at Saginaw, Mich., this 9th day of May 1956.

[SEAL]

F. B. NIEDERSTADT,
City Clerk.

Certificate No. 369.

REPORTS OF SPECIAL COMMITTEES

OCTOBER 28, 1954.

FROM: THE SPECIAL COMMITTEE ON THE SAGINAW VALLEY REGIONAL PLANNING COMMISSION

GENTLEMEN: Your special committee to which was referred the request of the Saginaw Valley Regional Planning Commission (pp. 6 and 7, this session) for an appropriation of $875 to finance the activities of the commission for 1955, has carefully considered this request and reports as follows:

The Saginaw Valley Regional Planning Commission requested an appropriation of $1,750 in the April 1954 session of the board. This appropriation was approved and when the report of the committee on finance was submitted to the board, the appropriation was tabled until this October session (pp. 13, 14, 46, and 63, April 1954 session).

Your committee advises that in its opinion the activities of the planning commission should not cease when and if the flood control project is completed. We recommend that the amended request of the planning commission for an appropriation of $875 be granted. It should be understood that this is not the last request that will be made to the board for funds by the commission and that if the planning commission is to continue it will be necessary to make additional appropriations to finance its activities from year to year.

We further recommend that this report be referred to the committee on finance.

Respectfully submitted.

CARL F. MILLER,
F. B. NIEDERSTADT,
JOHN MARTHEY,
Special Committee on the Saginaw Valley Regional Planning Commission.

By Supervisor Niederstadt:

That the report of the special committee be received and the recommendations contained therein adopted.

By Superintendent Wissmiller, as an amendment:

That the entire matter of the appropriation of $875 for the Saginaw Valley Regional Planning Commission be deferred until the January 1955 session of this board.

A rollcall vote was then taken on the amendment, which lost by the following rollcall:

Ayes—Supervisors Bauer, Doerr, Gielczyk, McInnis, McNamara, Root, Vasold, Ward, Weigl, Wissmiller, chairman—11.

Nays—Supervisors Baillie, Baker, Benway, Birchmeier, Bluemer, Borley, Brogger, Browne, Brydges, Bunchek, Darby, Deibel, Ervin, Frahm, Garey, Edward; Garey, John; Gill, Gustafson, Honaman, Janson, Jaquish, Jasper, LaBelle, Larner, Leaman, Leuenberger, Marshall, Marthey, Miller, Nash, Niederstadt, O'Brien, Polasky, Quackenbush, Rusher, Sanderson, Spiker, Sutto, Wills, Zauel—40.

Rollcall voted was then taken on the original motion which carried by the following rollcall:

Ayes—Supervisors Baillie, Baker, Benway, Birchmeier, Bluemer, Borley, Brogger, Browne, Brydges, Darby, Deibel, Ervin, Frahm, Garey, Edward; Garey, John; Gill, Gustafson, Jaquish, Jasper, LaBelle, Larner, Leaman, Marshall, Marthey, Miller, Nash, Niederstadt, Polasky, Quackenbush, Rusher, Sanderson, Spiker, Sutto, Wills, Zauel—35.

Nays—Supervisors Bauer, Bunchek, Doerr, Gielczyk, Honaman, Janson, Leuenberger, McInnis, McNamara, O'Brien, Root, Vasold, Ward, Weigl, Wissmiller, chairman—16.

STATE OF MICHIGAN,
County of Saginaw, ss:

I, William J. Leppien, clerk of the Circuit Court for the Tenth Judicial Circuit for Michigan and clerk of the Saginaw County Board of Supervisors, do hereby certify that the foregoing is a copy of the special committee on Saginaw Valley Regional Planning Commission which was adopted on October 30, 1954 at the 13th day session of the October 1954 session by the Saginaw County Board of Supervisors.

That I have compared the said copy with the original on file and of record in my office and that it is a correct transcript therefrom and of the whole thereof.

In witness whereof, I have hereunto set my hand and affixed the seal of said court, at the city of Saginaw, this 8th day of May A. D. 1956.

[SEAL] WILLIAM J. LEPPIEN,
Clerk of the Circuit Court for the Tenth Judicial Circuit for Michigan and County Clerk for Saginaw County, Mich.

OCTOBER 28, 1954

FROM THE SPECIAL COMMITTEE ON SAGINAW VALLEY REGIONAL PLANNING COMMISSION

Gentlemen: Your special committee appointed to make a study of the "objectives, achievements and planning" of the Saginaw Valley Regional Planning Commission (see p. 62, April 1954 session), reports as follows:

Problems created by periodic high water prompted the organization of the Commission. The first efforts to find a solution to these problems in the Saginaw area occurred in December 1944, when the first Saginaw Valley Conference on water problems was held in Saginaw. A second conference was held in May of 1946, in Midland and recommendations were made that enabling legislation be enacted and a Saginaw Valley Regional Commission created. The legislation was passed in May of 1946, and in November of that year the Commission was created and members were appointed by the late Governor Kim Sigler. Since that time the Commission's efforts have been largely spent in promoting the Flood Control Program for the Saginaw River and its tributaries. Approximately $75,000 has been used by the Commission of which $24,196.43 was received from the State and the balance was contributed by various boards of supervisors in the region. Most of the money was used for salaries for one full-time executive secretary and occasional stenographic help, the balance for travel expense and necessary office supplies.

Early attempts to organize a flood-control program failed because of the limited area included which resulted in a cost-to-benefit ratio which would not justify construction. However, with the enlarged area proposed by the Commission, the cost-to-benefit ratio increased to the point where the United States Army Corps of Engineers could participate.

To date surveys, preliminary estimates of cost and the Engineers' report have been completed. Two important steps remain to be accomplished, namely, authorization by Congress and final appropriation by Congress.

The Commission feels that the length of time and the amount of money spent in bringing the plans for the flood-control project to their present state of completion is not unreasonable for this type of program.

The entry of the United States Fish and Wild Life Service with a proposal to establish a wild life management area in the Shiawassee Flats District in conjunction with the proposed flood-control program has raised some opposition. However, your committee is advised that the wild life management area had been planned for some time and that the proposed flood-control program only made it come about sooner than was originally planned. The result will be a material reduction in the cost of the flood-control project to the participants.

The Saginaw Valley Regional Planning Commission is responsible to the Michigan Department of Economic Development (successor to Michigan Planning Commission) and by the enabling act, is authorized to "conduct all types of research studies, collect and analyze data, prepare maps, charts and tables, and conduct all necessary studies for the accomplishment of its other duties; it may make plans for the physical, social and economic development of the region;" (Sec. 125.19 C. L. 1948). It would therefore be the opinion of

your committee that the activities of the Commission would be determined by the boards of supervisors of the counties in the region and to the extent those counties are willing to contribute funds.

We recommend that each member of the board read the report submitted to them at the April 1954 session of the board.

Respectfully submitted.

EDWARD MCNAMARA,
CARL F. MILLER,
F. B. NIEDERSTADT,
JOHN MARTHEY,
LEWIS F. MCNALLY,
Special Committee on Saginaw Valley Regional Planning Commission.

By Supervisor Niederstadt:
That the report of the committee be received and filed.
Carried.

STATE OF MICHIGAN,
County of Saginaw, ss:

I, William J. Leppien, clerk of the Circuit Court for the Tenth Judicial Circuit for Michigan and clerk of the Saginaw County Board of Supervisors do hereby certify that the foregoing is a copy of the Special Committee on Saginaw Valley Regional Planning Commission which was received and filed by the Saginaw County Board of Supervisors on October 28, 1954, at the 11th day session of the October 1954 session of the Board.

That I have compared the said copy with the original on file and of record in my office and that it is a correct transcript therefrom and of the whole thereof.

In witness whereof, I have hereunto set my hand and affixed the seal of said court, at the city of Saginaw, this 8th day of May, A. D. 1956.

[SEAL] WILLIAM J. LEPPIEN,
Clerk of the Circuit Court for the Tenth Judicial Circuit for Michigan and County Clerk for Saginaw County, Mich.

STATE OF MICHIGAN, OFFICE OF THE GOVERNOR,
Lansing, March 30, 1954.

Col. FRANCIS H. FALKNER,
Resident Member, Board of Engineers for Rivers and Harbors,
Washington 25, D. C.

DEAR COLONEL FALKNER: It has been my privilege to attend several meetings of the Saginaw Valley Region Commission, and as a consequence, I am very familiar with the Corps of Engineers plan for flood control and conservation in the Saginaw Valley. I am also convinced that once undertaken, this project will bring great benefits to not only Saginaw Valley but to the economy of the State and Nation as well.

Therefore, I would like to assure you that the project has my enthusiastic support and I urge its approval by the Board of Engineers at the earliest possible date.

Further, I will lend my support to every effort to obtain necessary congressional authorization and appropriations during the present session in the event the project can be cleared in time for Congress to consider it.

Sincerely,

———— ————, *Governor.*

THE SENATE,
STATE OF MICHIGAN,
Lansing, March 24, 1954.

Col. F. H. FALKNER,
Resident Member, Corps of Engineers, United States Army
Board of Engineers for Rivers and Harbors,
Washington 25, D. C.

DEAR COLONEL FALKNER: The Michigan Legislature's Interim Study Committee on Water Resources desires at this time to add its support to the Corps of Engineers Flood Control and Conservation Plan for the Saginaw Valley, Michigan. Our committee has attended numerous meetings on this project for the

past 6 years and we are completely familiar with it. We believe it will add much to the economy of the valley, the State and the Nation. We urge approval of the Corps' report on "Saginaw River and Tributaries" by the Board of Engineers for Rivers and Harbors at the earliest possible date.

Yesterday, the Michigan Senate passed house bill No. 62 (Water management district enabling legislation), needed by the Saginaw Valley and other river basins in Michigan with similar problems to cooperate with the Corps of Engineers in constructing flood control and drainage projects, and from the local standpoint, financing, operating and maintaining them. Recently, this bill passed in the Michigan house of representatives 60–20.

May we also express our appreciation for the complete cooperation Michigan has received from the Milwaukee and Detroit district engineers and especially Colonel Nauman and his predecessors at Detroit and Colonel Trower, Chicago division engineer.

Sincerely yours,

Senator FRANK HEATH,
Bay City, Chairman.
Senator GARLAND B. LANE,
Flint, Secretary.
Senator CHARLES B. FRENSTRA,
Grand Rapids.
Representative LEO MILLER, *Jackson.*
Representative FRED R. DINGMAN,
Detroit.
Representative HOLLY E. HUBBELL,
Saginaw.

VILLAGE OF FRANKENMUTH,
Frankenmuth, Mich., April 8, 1954.

SAGINAW VALLEY REGIONAL PLANNING COMMISSION,
Lansing, Mich.

GENTLEMEN: At the regular meeting of the council of the village of Frankenmuth held on April 5, 1954, the following resolution in regard to the flood-control program of the Saginaw Valley Regional Planning Commission was introduced and adopted:

"*Resolved*, That the proposed plans of the United States Corps of Engineers are satisfactory and compatible with the village of Frankenmuth projected flood-control plans, the requirements for local cooperation are equitable and construction of the project will protect much valuable residential and industrial area against frequently recurring floods; and be it further,

Resolved, That it is a considered opinion of this council that the village of Frankenmuth will provide the required local cooperation whenever Congress appropriates the Federal share of the cost; and be it further

Resolved, That a copy of this resolution be forwarded to the Board of Engineers for Rivers and Harbors, Washington, D. C.; Saginaw Valley Regional Planning Commission, 411 West Michigan Avenue, Lansing; Senators Homer Ferguson and Charles E. Potter; and Representatives Alvin M. Bentley, E. A. Cederberg, Kit Clardy, Jesse P. Wolcott, and George A. Dondero."

The above resolution adopted by the council of the village of Frankenmuth on the 5th day of April 1954.

HAROLD ROEDEL, *Village Clerk.*

RESOLUTIONS

VILLAGE OF FRANKENMUTH

FRANKENMUTH, MICH., *September 11, 1951.*

To Whom It May Concern:

At a meeting of the council of the village of Frankenmuth held on Tuesday, September 4, 1951, the following resolution was presented by Satow and supported by Leslie and unanimously adopted:

Whereas the Detroit district, Corps of Engineers, United States Army, has prepared a plan for a flood-control project to protect the village of Frankenmuth against serious losses from floods which have occurred frequently; and

ments were carried out along the channel of the Flint River, within the city limits of the city of Flint; and

Whereas the proposed participation by the Federal Government and the city of Flint in the cost of the project, inside the city Flint, seems fair and equitable; Now, therefore, be it

Resolved, That the proper city officials are hereby authorized to continue cooperating with the Saginaw Valley Regional Planning Commission and the United States Army engineers, in an effort to formulate a project covering the widening, deepening, and diking of the channel of the Flint River, within the city limits of the city of Flint, with the understanding that although the city of Flint is very interested in such a project, no commitments can be made until exact costs are ascertained, Federal Government participation assured, and the matter of approving or disapproving the program, as well as financing the city of Flint's share of the cost of the project has received official action by the Flint City Commission.

Approved by unanimous vote at the regular meeting of the Flint City Commission, November 5, 1951.

HAROLD M. KINDER, *City Manager.*

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public, in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

CITY OF CORUNNA

Whereas the city Council of Corunna has been asked by the Saginaw Valley Regional Planning Commission to indicate its willingness to cooperate with the Corps of Engineers, United States Army, in the construction of a project to protect this city against floods which in the past have resulted in losses in excess of $3,000 annually; and

Whereas it appears the United States Government may participate financially in the construction of a flood-control project at Corunna provided the city assure the Corps of Engineers that it will provide the local cooperation required; Now, therefore, be it

Resolved, That the Council of the City of Corunna believes the project designed by the Corps of Engineers to protect the city against floods to be satisfactorily designed and necessary; and be it further

Resolved, That this council assures the Corps of Engineers it will provide rights-of-way and other items of local cooperation required of the city and recommends that future councils do likewise.

I, Asa M. Elkins, city clerk, city of Corunna, county of Shiawassee, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted unanimously at a regular meeting of the city council held Monday, February 18, 1952.

ASA M. ELKINS, *City Clerk.*

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public, in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

CITY OF OWOSSO

Resolved, That the proposed plans of the United States Corps of Engineers are satisfactory and compatible with the city of Owosso's projected flood-control plans, the requirements for local cooperation are equitable and construction of the project will protect much valuable residential and industrial area against frequently recurring floods; and be it further

Resolved, That it is the considered opinion of this commission that the city of Owosso will provide the required local cooperation whenever Congress appropriates the Federal share of the cost; and be it further

Resolved, That a copy of this resolution be forwarded to the Board of Engineers for Rivers and Harbors, Washington 25, D. C.; Saginaw Valley Regional Commission, 411 West Michigan Avenue, Lansing; Senators Homer Ferguson and Charles E. Potter; and Representatives Alvin M. Bentley, E. A. Cederberg, Kit Clardy, Jesse P. Wolcott, and George A. Dondero.

I hereby certify that the foregoing is a true copy of a resolution passed by the Owosso City Commission at a regular meeting held March 9, 1954.

GEORGE VAN EPPS,
City Clerk, Owosso, Mich.

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public, in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

CITY OF MIDLAND

Whereas the City Council of the City of Midland has been asked by the United States Army Engineers Corps to indicate the degree of its willingness to cooperate in the flood-control plan as tentatively outlined in their communication of August 20, 1951, attached hereto; and

Whereas no detailed plan has as yet been submitted for approval requiring any definite commitment of funds; therefore be it

Resolved by the City Council of the City of Midland, That, although it is recognized that the present council cannot commit future councils to any decisions on future proposals, the present council goes on record as favoring in general that portion of the tentatively proposed plan dealing with the improvements to be made within and immediately adjacent to the city of Midland; and that because approximately two-thirds of the area to be protected by the proposed construction at Midland will lie within the township of Midland, the township of Midland be asked to participate in the cost of the proposed improvement at Midland in proportion to the benefits to be received by said township; *Provided, however*, That this resolution not be construed as indicating approval or disapproval of any portion of the proposed plan not dealing with the city or township of Midland; and that it be understood that the present council does not feel that the city or township of Midland should be assessed for any construction in the so-called Shiawassee Flats area any more than that the governmental units upstream from Midland should be assessed for similar improvements within the city and township of Midland; and that it be understood that the location of the proposed dikes may be modified in accordance with plans now being contemplated involving the purchase of land in behalf of the city of Midland for parks.

Yeas: Olds, Poffenberger, Groening, Clack.

Nays: None.

Absent: Hunt.

I, Weyant Pangborn, city clerk, city of Midland, county of Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a four-fifths yea vote of all the councilmen elect at a regular meeting of the city council held Wednesday, November 14, 1951.

WEYANT PANGBORN, *City Clerk.*

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954

your committee that the activities of the Commission would be determined by the boards of supervisors of the counties in the region and to the extent those counties are willing to contribute funds.

We recommend that each member of the board read the report submitted to them at the April 1954 session of the board.

Respectfully submitted.

EDWARD MCNAMARA,
CARL F. MILLER,
F. B. NIEDERSTADT,
JOHN MARTHEY,
LEWIS F. MCNALLY,
Special Committee on Saginaw Valley Regional Planning Commission.

By Supervisor Niederstadt:
That the report of the committee be received and filed.
Carried.

STATE OF MICHIGAN,
County of Saginaw, ss:

I, William J. Leppien, clerk of the Circuit Court for the Tenth Judicial Circuit for Michigan and clerk of the Saginaw County Board of Supervisors do hereby certify that the foregoing is a copy of the Special Committee on Saginaw Valley Regional Planning Commission which was received and filed by the Saginaw County Board of Supervisors on October 28, 1954, at the 11th day session of the October 1954 session of the Board.

That I have compared the said copy with the original on file and of record in my office and that it is a correct transcript therefrom and of the whole thereof.

In witness whereof, I have hereunto set my hand and affixed the seal of said court, at the city of Saginaw, this 8th day of May, A. D. 1956.

[SEAL] WILLIAM J. LEPPIEN,
Clerk of the Circuit Court for the Tenth Judicial Circuit for Michigan and County Clerk for Saginaw County, Mich.

STATE OF MICHIGAN, OFFICE OF THE GOVERNOR,
Lansing, March 30, 1954.

Col. FRANCIS H. FALKNER,
Resident Member, Board of Engineers for Rivers and Harbors,
Washington 25, D. C.

DEAR COLONEL FALKNER: It has been my privilege to attend several meetings of the Saginaw Valley Region Commission, and as a consequence, I am very familiar with the Corps of Engineers plan for flood control and conservation in the Saginaw Valley. I am also convinced that once undertaken, this project will bring great benefits to not only Saginaw Valley but to the economy of the State and Nation as well.

Therefore, I would like to assure you that the project has my enthusiastic support and I urge its approval by the Board of Engineers at the earliest possible date.

Further, I will lend my support to every effort to obtain necessary congressional authorization and appropriations during the present session in the event the project can be cleared in time for Congress to consider it.

Sincerely,

———— ————, *Governor.*

THE SENATE,
STATE OF MICHIGAN,
Lansing, March 24, 1954.

Col. F. H. FALKNER,
Resident Member, Corps of Engineers, United States Army
Board of Engineers for Rivers and Harbors,
Washington 25, D. C.

DEAR COLONEL FALKNER: The Michigan Legislature's Interim Study Committee on Water Resources desires at this time to add its support to the Corps of Engineers Flood Control and Conservation Plan for the Saginaw Valley, Michigan. Our committee has attended numerous meetings on this project for the

past 6 years and we are completely familiar with it. We believe it will add much to the economy of the valley, the State and the Nation. We urge approval of the Corps' report on "Saginaw River and Tributaries" by the Board of Engineers for Rivers and Harbors at the earliest possible date.

Yesterday, the Michigan Senate passed house bill No. 62 (Water management district enabling legislation), needed by the Saginaw Valley and other river basins in Michigan with similar problems to cooperate with the Corps of Engineers in constructing flood control and drainage projects, and from the local standpoint, financing, operating and maintaining them. Recently, this bill passed in the Michigan house of representatives 60–20.

May we also express our appreciation for the complete cooperation Michigan has received from the Milwaukee and Detroit district engineers and especially Colonel Nauman and his predecessors at Detroit and Colonel Trower, Chicago division engineer.

Sincerely yours,

Senator FRANK HEATH,
Bay City, Chairman.
Senator GARLAND B. LANE,
Flint, Secretary.
Senator CHARLES B. FRENSTRA,
Grand Rapids.
Representative LEO MILLER, *Jackson.*
Representative FRED R. DINGMAN,
Detroit.
Representative HOLLY E. HUBBELL,
Saginaw.

VILLAGE OF FRANKENMUTH,
Frankenmuth, Mich., April 8, 1954.

SAGINAW VALLEY REGIONAL PLANNING COMMISSION,
Lansing, Mich.

GENTLEMEN: At the regular meeting of the council of the village of Frankenmuth held on April 5, 1954, the following resolution in regard to the flood-control program of the Saginaw Valley Regional Planning Commission was introduced and adopted:

"*Resolved*, That the proposed plans of the United States Corps of Engineers are satisfactory and compatible with the village of Frankenmuth projected flood-control plans, the requirements for local cooperation are equitable and construction of the project will protect much valuable residential and industrial area against frequently recurring floods; and be it further,

Resolved, That it is a considered opinion of this council that the village of Frankenmuth will provide the required local cooperation whenever Congress appropriates the Federal share of the cost; and be it further

Resolved, That a copy of this resolution be forwarded to the Board of Engineers for Rivers and Harbors, Washington, D. C.; Saginaw Valley Regional Planning Commission, 411 West Michigan Avenue, Lansing; Senators Homer Ferguson and Charles E. Potter; and Representatives Alvin M. Bentley, E. A. Cederberg, Kit Clardy, Jesse P. Wolcott, and George A. Dondero."

The above resolution adopted by the council of the village of Frankenmuth on the 5th day of April 1954.

HAROLD ROEDEL, *Village Clerk.*

RESOLUTIONS

VILLAGE OF FRANKENMUTH

FRANKENMUTH, MICH., *September 11, 1951.*

To Whom It May Concern:

At a meeting of the council of the village of Frankenmuth held on Tuesday, September 4, 1951, the following resolution was presented by Satow and supported by Leslie and unanimously adopted:

Whereas the Detroit district, Corps of Engineers, United States Army, has prepared a plan for a flood-control project to protect the village of Frankenmuth against serious losses from floods which have occurred frequently; and

Whereas it appears the United States Government might participate financially in the construction of the project, provided the village of Frankenmuth assures the Corps of Engineers that it will provide required items of local cooperation: Now, therefore, be it

Resolved, That the Village Council of Frankenmuth approve and endorse the Corps of Engineers flood-control plan at this location; and be it further

Resolved, That this council assures the Corps of Engineers that the village of Frankenmuth will cooperate by providing the required items of local cooperation.

HAROLD ROEDEL, *Clerk.*

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

CITY OF VASSAR

By Councilman Lee:

Be it resolved, That the proposed plans, with some modification, of the United States Corps of Engineers would be generally satisfactory and compatible with the city of Vassar's projected flood-control plans, the requirements for local cooperation are equitable and construction of the project will protect much valuable residential and industrial area against frequently recurring floods; and be it further

Resolved, That it is the considered opinion of this council that the city of Vassar will provide the required local cooperation whenever Congress appropriates the Federal share of the cost; and be it further

Resolved, That a copy of this resolution be forwarded to the Board of Engineers for Rivers and Harbors, Washington, D. C.; Saginaw Valley Regional Planning Commission, 411 West Michigan Avenue, Lansing; Senators Homer Ferguson and Charles E. Potter; and Representatives Alvin M. Bentley, E. A. Cederberg, Kit Clardy, Jesse P. Wolcott, and George A. Dondero.

Vote: Yes—4; No. 0; Absent—Councilman Shurlow.

I, Everett E. Brown, the city clerk of the city of Vassar, Mich., do hereby certify that the foregoing is a true copy of a resolution adopted by the city council of the city of Vassar, at a regular meeting held Monday, March 8, 1954.

EVERETT E. BROWN, *City Clerk.*

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

SANILAC FLATS, SANILAC COUNTY, MICH.

Whereas the Corps of Engineers, United States Army, has prepared a plan to protect the area known as the Sanilac Flats, Sanilac County, Mich., against annual floods and provide an outlet for needed local drains estimated by the United States Soil Conservation Service to total approximately $3 million of construction in order to bring the land in this drainage basin into full productivity; and

Whereas construction of the project will provide benefits far in excess of its cost; and

Whereas the United States Government may participate in the cost of construction of the Sanilac Flats major drainage project provided local interests furnish assurances they will provide the necessary local cooperation: Now, therefore, be it

Resolved, That the Board of Supervisors of Sanilac County approve and endorse the Corps of Engineers plan for protecting the Sanilac Flats and urge that the project be constructed at the earliest possible date, and assure the Corps of Engineers and the United States Congress that it is the opinion of this Board

that local interests will organize a drainage or flood-control district and provide the local share of the cost of the project; and be it further

Resolved, That a copy of this resolution be forwarded to Congressman Jesse P. Wolcott; the district engineer, Corps of Engineers, Detroit; and the Saginaw Valley Regional Planning Commission.

Moved by Supervisor Gillies and supported by Supervisor Minard that the committee's resolution be accepted and become part of the record.

Motion declared carried.

I, Oscar F. Buschlen, clerk of the circuit court for the county of Sanilac, do hereby certify that the above and foregoing is a true and correct copy of the board of supervisors as appears of record in my office; that I have compared the same with the original, and it is a true transcript therefrom and of the whole thereof.

In testimony whereof, I have hereunto set my hand and affixed the seal of said court and county at the city of Sandusky this 8th day of November A. D. 1951.

OSCAR F. BUSCHLEN, *County Clerk*.

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public*.

My commission expires April 7, 1954.

CASS RIVER DRAINAGE COMMITTEE

SEPTEMBER 26, 1951.

The following is a resolution submitted by Mr. J. Neil Muir, Sanilac County drain commissioner, which was adopted at a meeting of the Cass River Drainage Committee held in the courthouse, Sandusky, Mich., on April 6. In addition to the committee, which consists of the supervisor and at least 1 additional property owner from each township in the drainage basin, about 60 interested farmers attended this meeting. The entire group voted on the adoption of the resolution. The resolution was offered by Harry Prowse and supported by George Heussner, both of Marlette, Mich.

Resolved, That the group attending the meeting of the Cass River Drainage Committee, held this 6th day of April 1951 in Sandusky, Mich., endorse and approve the Corps of Engineers' plan as presented here for protecting the Sanilac Flats against floods and providing an outlet for the many needed drains in the Cass River drainage basin in Sanilac County.

NOTE.—Requirements as to local cooperation were carefully explained at this meeting, and it must be assumed those who voted for the resolution understood that by approving it they indicated their willingness to organize a drainage district and provide rights-of-way and other required items of local cooperation. Approximately six persons opposed the resolution. These were residents of a downstream area with no flood or drainage problems. All others attending the meeting were enthusiastic in their support of the project.

GALE H. GIBSON.

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public*.

My commission expires April 7, 1954.

CITY OF FLINT

NOVEMBER 5, 1951.

Whereas the city of Flint has been cooperating with the Saginaw Valley Flood Control Commission and the United States Army engineers in an attempt to formulate a valley flood-control project; and

Whereas preliminary studies indicate a flood of the magnitude of the 1947 flood could be contained providing certain widening, diking, and deepening improve-

ments were carried out along the channel of the Flint River, within the city limits of the city of Flint; and

Whereas the proposed participation by the Federal Government and the city of Flint in the cost of the project, inside the city Flint, seems fair and equitable; Now, therefore, be it

Resolved, That the proper city officials are hereby authorized to continue cooperating with the Saginaw Valley Regional Planning Commission and the United States Army engineers, in an effort to formulate a project covering the widening, deepening, and diking of the channel of the Flint River, within the city limits of the city of Flint, with the understanding that although the city of Flint is very interested in such a project, no commitments can be made until exact costs are ascertained, Federal Government participation assured, and the matter of approving or disapproving the program, as well as financing the city of Flint's share of the cost of the project has received official action by the Flint City Commission.

Approved by unanimous vote at the regular meeting of the Flint City Commission, November 5, 1951.

HAROLD M. KINDER, *City Manager.*

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public, in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

CITY OF CORUNNA

Whereas the city Council of Corunna has been asked by the Saginaw Valley Regional Planning Commission to indicate its willingness to cooperate with the Corps of Engineers, United States Army, in the construction of a project to protect this city against floods which in the past have resulted in losses in excess of $3,000 annually; and

Whereas it appears the United States Government may participate financially in the construction of a flood-control project at Corunna provided the city assure the Corps of Engineers that it will provide the local cooperation required; Now, therefore, be it

Resolved, That the Council of the City of Corunna believes the project designed by the Corps of Engineers to protect the city against floods to be satisfactorily designed and necessary; and be it further

Resolved, That this council assures the Corps of Engineers it will provide rights-of-way and other items of local cooperation required of the city and recommends that future councils do likewise.

I, Asa M. Elkins, city clerk, city of Corunna, county of Shiawassee, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted unanimously at a regular meeting of the city council held Monday, February 18, 1952.

ASA M. ELKINS, *City Clerk.*

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public, in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

CITY OF OWOSSO

Resolved, That the proposed plans of the United States Corps of Engineers are satisfactory and compatible with the city of Owosso's projected flood-control plans, the requirements for local cooperation are equitable and construction of the project will protect much valuable residential and industrial area against frequently recurring floods; and be it further

Resolved, That it is the considered opinion of this commission that the city of Owosso will provide the required local cooperation whenever Congress appropriates the Federal share of the cost; and be it further

Resolved, That a copy of this resolution be forwarded to the Board of Engineers for Rivers and Harbors, Washington 25, D. C.; Saginaw Valley Regional Commission, 411 West Michigan Avenue, Lansing; Senators Homer Ferguson and Charles E. Potter; and Representatives Alvin M. Bentley, E. A. Cederberg, Kit Clardy, Jesse P. Wolcott, and George A. Dondero.

I hereby certify that the foregoing is a true copy of a resolution passed by the Owosso City Commission at a regular meeting held March 9, 1954.

GEORGE VAN EPPS,
City Clerk, Owosso, Mich.

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public, in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

CITY OF MIDLAND

Whereas the City Council of the City of Midland has been asked by the United States Army Engineers Corps to indicate the degree of its willingness to cooperate in the flood-control plan as tentatively outlined in their communication of August 20, 1951, attached hereto; and

Whereas no detailed plan has as yet been submitted for approval requiring any definite commitment of funds; therefore be it

Resolved by the City Council of the City of Midland, That, although it is recognized that the present council cannot commit future councils to any decisions on future proposals, the present council goes on record as favoring in general that portion of the tentatively proposed plan dealing with the improvements to be made within and immediately adjacent to the city of Midland; and that because approximately two-thirds of the area to be protected by the proposed construction at Midland will lie within the township of Midland, the township of Midland be asked to participate in the cost of the proposed improvement at Midland in proportion to the benefits to be received by said township; *Provided, however*, That this resolution not be construed as indicating approval or disapproval of any portion of the proposed plan not dealing with the city or township of Midland; and that it be understood that the present council does not feel that the city or township of Midland should be assessed for any construction in the so-called Shiawassee Flats area any more than that the governmental units upstream from Midland should be assessed for similar improvements within the city and township of Midland; and that it be understood that the location of the proposed dikes may be modified in accordance with plans now being contemplated involving the purchase of land in behalf of the city of Midland for parks.

Yeas: Olds, Poffenberger, Groening, Clack.

Nays: None.

Absent: Hunt.

I, Weyant Pangborn, city clerk, city of Midland, county of Midland, State of Michigan, do hereby certify that the foregoing is a true and correct copy of a resolution adopted by a four-fifths yea vote of all the councilmen elect at a regular meeting of the city council held Wednesday, November 14, 1951.

WEYANT PANGBORN, *City Clerk.*

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954

GENESSE SOIL CONSERVATION DISTRICT

FLINT 3, MICH., *March 20, 1954.*

BOARD OF ENGINEERS FOR RIVERS AND HARBORS,
Washington 25, D. C.

DEAR SIRS: The Board of directors of the Genesee Soil Conservation District wishes to submit the following resolution:

"*Resolved*, That the Genesee Soil Conservation District is in favor of the Saginaw Valley watershed management plan and give our support to such action with minor changes as may be necessary and desirable as the plan is put into operation; be it also

"*Resolved*, that we take this opportunity to express our appreciation of the work of the United States Army Corps of Engineers on this project, and give special thanks to the cooperation of Col. Arthur C. Nauman, Detroit district office."

Sincerely yours,

MRS. ROBERT SHEPARD, *Secretary-Treasury.*

cc: Gale Gibson, regional planning commission.

Mr. GALE GIBSON,
Executive Secretary,
Lansing 15, Mich.

DEAR MR. GIBSON: Enclosed please find a copy of our resolution regarding the proposed Saginaw Valley watershed management plan, which has been sent to the Board of Engineers for Rivers and Harbors.

We enjoyed the meeting at Frankenmuth very much and sincerely hope that after these many years that both Federal and State Governments will see fit to aid the Saginaw Valley.

Sincerely yours,

MRS. ROBERT SHEPARD, *Secretary-Treasury.*

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public, in and for Ingham County, this 23d day of March 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

The following resolution was offered by Loyal Scothan and supported by Kermit Carey, director, Genesee County Soil Conservation District, at the 7th annual meeting of the Saginaw Valley Regional Commission held at Frankenmuth, March 19, 1954. The motion carried 173 to 15 with 14 not voting.

Resolved, That the members of the Saginaw Valley Regional Planning, State and local public officials and residents of the valley attending this March 19, 1954, meeting of the commission, hereby endorse the Corps of Engineers' flood control and conservation plan for the Saginaw Valley, subject to such minor revisions as may be found necessary and desirable during the preparation of contract plans; and be it further

Resolved, That the attendance list at this meeting be attached to and be part of this resolution, with the exception of those present who notify the commission's secretary they desire to be listed as voting nay, or not voting and be it further

Resolved, That copies of this resolution be forwarded by the Commission's executive secretary to the Board of Engineers for Rivers and Harbors; the Secretary of the United States Migratory Bird Conservation Commission (Secretary of Interior, Chairman, Douglas McKay; Secretary of Agriculture, Ezra Benson; Secretary of Commerce, Sinclair Weeks; A. Willis Robertson, Senator from Virginia; John W. Bricker, Senator from Ohio; Frank M. Karsten, Representative from Missouri; August H. Andresen, Representative from Minnesota; Arthur A. Riemer, Secretary); to Senators Ferguson and Potter; to Representatives Dondero, Wolcott, Bentley, Cederberg and Clardy; and to the chairman, Projects Committee, National Rivers and Harbors Congress, Washington, D. C., Wm. H. Webb, executive vice president.

I certify that the above and the attached listing of those who voted aye, nay and not voting is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a Notary Public, in and for Ingham County, this 23d day of March, 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

ENDORSING THE SHIAWASSEE FLATS WILDLIFE MANAGEMENT AND FLOOD CONTROL PROJECTS, SAGINAW, MICH.

Adopted unanimously June 15, 1952, by delegates attending the 15th Annual Convention of the Michigan United Conservation Clubs

Whereas a plan has been developed by the United States Army Engineers in cooperation with the United States Fish and Wildlife Service, Michigan Department of Conservation and Saginaw Valley Regional Planning Commission to protect several localities in the Saginaw Valley against damaging floods which calls for the utilization of approximately 20,000 acres of the Shiawassee Flats located south and west of Saginaw as a combination wildlife area and floodwater storage reservoir; and

Whereas this 20,000-acre wildlife area of which from 3,500 to 5,000 acres will be maintained as permanent pool or lake, will provide a wildfowl resting and feeding grounds at the crossroads of the Mississippi and Atlantic flyways which the United States Fish and Wildlife Service has long recognized as desirable and will also provide public hunting, fishing, trapping, boating and other recreational benefits; Now, therefore, be it

Resolved by the Michigan United Conservation Clubs at its fifteenth annual convention, that all units of government and agencies thereof concerned be urged to take the necessary legal steps, acquire the necessary lands and construct the Shiawassee Flats wildlife area project at the earliest possible date and expand the soil conservation phase of the program as rapidly as possible; and be it further

Resolved, That copies of this resolution be sent to the agencies mentioned heretofore and also to Michigan Senators and Congressmen; members of the Michigan Legislative Committee on Water Resources; the National Wildlife Federation; Wildlife Management Institute; and the Outdoor Writers of America.

VOLMAR J. MILLER,
President.
HARRY R. GAINES,
Secretary.

I certify that the above is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a notary public, in and for Ingham County, this 23d day of March, 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

PETITION ON SHIAWASSEE FLATS PROJECT

ST. CHARLES, MICH., *March 3, 1954.*

Mr. GALE H. GIBSON,
Executive Secretary, Saginaw Valley Regional Commission,
Lansing, Mich.

DEAR GALE: Please forward copies of this communication to the Board of Engineers, for Rivers and Harbors, the secretary of the Federal Migratory Bird Conservation Commission, and the Michigan congressional delegation.

We the undersigned residents of the St. Charles community urge approval of the Corps of Engineers plan for the Shiawassee Flats and construction of the flood-control project and wildlife area because:

(1) It will protect business and residential property and a large number of farms in the area against serious losses due to floods that occur frequently.

(2) The wildlife area will provide recreation (hunting, fishing, icefishing, boating, parks, and other facilities) in a heavily populated area with no lakes or public hunting grounds.

(3) The wildlife area will provide year around recreation and will be the outstanding tourist attraction in the lower Peninsula of Michigan and within a very few years Saginaw Counties tourist dollar income will be exceeded by that of only one other county in the Lower Peninsula.

(List omitted.)

I certify that the above and the attached listing of those who voted aye, nay and not voting is an exact copy of the original.

GALE H. GIBSON.

Subscribed and sworn to before me, a Notary Public, in and for Ingham County, this 23d day of March, 1954.

EVELYN BUMGARNER, *Notary Public.*

My commission expires April 7, 1954.

REQUEST FOR AUTHORIZATION OF SAGINAW RIVER AND TRIBUTARIES FLOOD CONTROL PROJECT, SAGINAW, MICH.

FEBRUARY 3, 1956.

GENTLEMEN: The Saginaw Valley Regional Commission by resolution authorized me to submit this request to the United States Congress to consider authorization of construction during the present session, of the Saginaw River and tributaries project for flood control and other purposes. This project was approved by the Board of Engineers for Rivers and Harbors in May 1954 after 35 years of surveys, studies, and reports by local, State, and Federal agencies.

The Saginaw Valley Regional Commission is legally authorized to represent the 21 counties all or partially drained by the Saginaw River system, in seeking authorization and appropriations necessary to construct this vitally necessary project. The Michigan Legislature recognized the Saginaw Valley problem and in effect endorsed the project by providing enabling legislation in 1954 to permit creation of water management districts with all necessary authority to construct, operate, and maintain flood control and drainage projects in cooperation with the State, the United States, or agencies thereof. Creation of a water management district in the Saginaw Valley is underway.

The Saginaw River and tributaries project is a multiple-unit project designed to protect six cities against frequent, serious losses due to floods. A major drainage project in the area known as the Sanilac Flats will protect approximately 7,000 acres of farmland against annual floods and provide an outlet for 3 million of local drains to be constructed entirely with local funds. Construction of the outlet and these local drains was found necessary by the United States Soil Conservation Service to adequately drain 143,000 acres of fertile, but presently unprofitable, farmland in this drainage basin.

The Shiawassee Flats unit is a multiple-use project designed to (1) provide flood protection for the city of Saginaw and adjacent farm and rural-residence area; (2) provide an outlet for the valley's $50 million drainage system which due to an inadequate outlet and injunctions that prevent maintenance and new construction, has deteriorated in many areas to the point that farming is a gamble and in wet years unprofitable; and (3) provide a 20,000 acre combined (*a*) storage basin, (*b*) recreation area, and (*c*) a needed wildfowl refuse in the Mississippi chain of refuges. The United States Fish and Wildlife Service, the Michigan Department of Conservation, and local interests through a water management district will cooperate with the United States in the construction of the Shiawassee Flats project.

The governing bodies of the local units of government concerned, the United States Fish and Wildlife Service and the Michigan Department of Conservation join us in urging your consideration of authorization of the Saginaw River and tributaries project and appropriation of Federal funds necessary to start construction at the earliest possible date.

In support of our request, we submit herewith certified copies of numerous resolutions and petitions by local units of government, organizations, and agencies. We also submit an illustrated publication by our commission which summarizes costs, benefits, enabling legislation, and other data relative to our Saginaw Valley watershed management program.

The residents of the Saginaw Valley affected by floods and poor drainage, Michigan sportsmen, Michigan Department of Conservation, and numerous other organizations and agencies including the Saginaw Valley Regional Commission, will deeply appreciate your careful consideration of our request.

Sincerely yours,

PHELPS VOGELSANG,
Chairman, Saginaw Valley Regional Commission.

Mr. VOGELSANG. Also we have a brochure that may be of interest.

(The brochure referred to will be found in the files of the subcommittee.)

Mr. MACK. Are you speaking for all of these projects?

Mr. VOGELSANG. Yes, sir.

Mr. MACK. In favor of all of them?

Mr. VOGELSANG. Yes, sir.

Mr. BALDWIN. Mr. Chairman, since you are speaking for all these projects, Mr. Vogelsang, could you provide us with any further information on how these local costs are proposed to be raised in each of these areas that are affected?

Mr. VOGELSANG. The enabling act by the State of Michigan allows a group of counties or separate entities to join together in a project of this kind that crosses county lines under certain stipulations as to how it will be handled. Actually, upon any approval of this project, a board of management will be formed under the law, which in turn will allocate costs based on benefits received, under due process of law, with hearings. And this is under the act of 1954. So that any costs at the present time or any allocation of costs cannot be established until the hearings of the management board.

So that at the present time there are a few estimates that are shown, but they are not accurate and cannot be accurate until the time that the hearings are set and the management board conducts them.

Mr. BALDWIN. Thank you.

Mr. ROGERS. Mr. Chairman, may I ask a question?

Mr. DEMPSEY. Yes.

Mr. ROGERS. Actually, the division of cost will be just as provided by your law; will it not?

Mr. VOGELSANG. That's right.

Mr. ROGERS. There is nothing unusual about it?

Mr. VOGELSANG. That's right.

Mr. ROGERS. Also, I wondered about how often this area is flooded?

Mr. VOGELSANG. Well, practically every year and sometimes several times.

Mr. ROGERS. At least once a year this whole area is flooded?

Mr. VOGELSANG. That's right. Now it may vary according to the certain river. There is a large area involved. My home is Midland, Mich., and we are now having our third flood this season in Midland.

Mr. ROGERS. Is any of this area under flooded conditions now?

Mr. VOGELSANG. Very much so. We are completely under water in many of the areas.

Mr. ROGERS. How long has this condition existed? How many years back can you remember this?

Mr. VOGELSANG. From the beginning of time, I believe.

Mr. ROGERS. And some of this area is under flood right now?

Mr. VOGELSANG. That's right; as those pictures that Mr. Bentley had will show.

Mr. ROGERS. I have great sympathy for you, because we have the same condition in many parts of Florida, and I think this is a very urgent project, certainly, if you are under flood conditions now.

Thank you, Mr. Chairman.

Mr. MACK. Mr. Chairman, I would like to clear up one point with the Army engineers if I may. There are 10 flood control projects here in the Saginaw River Basin. I notice that the 1 project, the Shiawassee, involves the expenditure of 60 percent of entire cost of the 10 projects. What percentage of the Shiawassee project is for wildlife and what percentage is flood control?

Mr. WEINKAUFF. Thirty percent has been allocated to fish and wildlife.

Mr. MACK. Seventy percent is flood control?

Mr. WEINKAUFF. Yes, sir.

Mr. ROGERS. May I ask just one question? Do I understand that this Shiawassee Flats is a catch basin? Is that what it is designed for?

Mr. WEINKAUFF. The Shiawassee Flats in its natural condition is a catch basin, and, in addition, in the improved state we have levees, and the levees will channel the initial flow down out into the Great Lakes, and then the three lateral reservoirs will in sequence take this peak flow which exceeds the flow to provide for passage safely through the city of Saginaw.

Mr. ROGERS. So that is a very important element in your whole plan?

Mr. WEINKAUFF. Yes, sir. The plan must be functionally as it is shown to be complete.

Mr. ROGERS. Thank you.

Mr. SCUDDER. I would like to ask a further question. Thirty percent is quite a substantial amount of this large project. Isn't it the custom in your State to set aside resting areas for waterfowl and for local sportsmen's hunting areas?

Mr. VOGELSANG. This is the second waterfowl resting area proposed in Michigan. We have one now in the upper peninsula.

Mr. SCUDDER. You are not asking Federal funds to develop that part?

Mr. VOGELSANG. No, sir.

Mr. SCUDDER. That is going to be handled by the local interests?

Mr. VOGELSANG. That's right, and the Federal Wildlife Service plus the State Conservation Department of Michigan.

Actually, Shiawassee Flats area, being the dumping ground of the five rivers and that being the major cost of the project, all of the 21 counties pushing water into the Shiawassee Flats will participate in the cost of the Shiawassee Flats project—not only their local area but also the Shiawassee Flats area—because that is the catch basin of all the water in the valley.

Mr. DONDERO. Mr. Chairman, I am not a member of the subcommittee, but the gentleman's residence rather intrigued me. You say you are a citizen of Midland County?

Mr. VOGELSANG. Yes, sir.

Mr. DONDERO. Do you live in the city of Midland?

Mr. VOGELSANG. Yes, sir.

Mr. DONDERO. Have you any interest in the township of Hope?

Mr. VOGELSANG. Yes, being our——

Mr. DONDERO. It so happened my family owned considerable land in that township some years ago. I just wondered if you came from that part of the county.

Mr. VOGELSANG. Well, they are just north of us. It is the next township north.

Mr. DONDERO. Mr. Chairman, I am grateful to you. I am greatly interested in this project because I am personally familiar with a good deal of it, having been over there a great many times.

Mr. DEMPSEY. You have been on the committee for so long I think you have visited about every project in the country.

Mr. DONDERO. A good many.

Mr. VOGELSANG. Hope Township is rather wet at the present time.

Mr. CLARK. Mr. Chairman, I want to state at this time that a lot of the subcommittee who went down to Florida got a sneak preview of all this from Mr. Jensen, and we are well aware of the needs of this flood-control area in your district.

Mr. BECKER. You mean Florida is under water too?

Mr. ROGERS. We have been through that before.

Mr. VOGELSANG. If there is nothing further, gentlemen, thank you.

Mr. DEMPSEY. We will hear next from Mr. Hayworth.

STATEMENT OF HON. DON HAYWORTH, A MEMBER IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. HAYWORTH. Mr. Chairman and members of the committee, it is a privilege for me to appear before you on this subject, and I would like to leave with the committee a mimeographed statement and make at this time an extemporaneous statement of the situation as I have known it for several years in this particular area.

The two principal cities in my district are Flint and Lansing. It happens that both of these are up for consideration for flood control. However, the Lansing area, which is concerned with the Grand River and the Red Cedar River, is not yet past the Budget. We hope it will be soon. But the one which I am particularly interested in right now is the Saginaw River Valley, which is before you for consideration at the present time.

I have been well acquainted with this situation for a number of years. As a matter of fact, it was several years ago that I first knew this most intimately. There was a tremendous flood, and I had business over in the city of Flint. I went over there and saw from a short distance a large office building of perhaps 13 stories that had several feet of water on the main floor of that building, and tens of thousands of dollars worth of electrical equipment was completely destroyed in that particular flood and in that building.

In addition, there were, I would say, practically no businesses of the retail business and small factories that were able to continue at that time because of the great difficulties of transportation around the city. There were many losses due to floods of equipment and factories close to the river.

In addition to that, transportation around the entire section was completely tied up.

Now, I just have the Flint Journal which came in this morning which said that some 3,600 people had been taken from their homes by

boats, presumably because of the fact that the waters had risen around their homes and they could not get out otherwise.

I want to say as a Member of Congress, Mr. Chairman, that I personally have seen these things. I have seen floods, as you have seen them, and know the terrific damage they can do. And I hope that you take my word for it as a colleague that the people of Flint are in great need of flood control in this particular situation, and anything that can be done by the Federal Government will be greatly deserved and greatly appreciated.

I thank you for having the privilege of appearing before you.

Mr. DEMPSEY. Any questions?

Mr. BUSH. Is there any opposition to this project in any of the areas?

Mr. DEMPSEY. Yes. We are going to have a witness testify.

Mr. HAYWORTH. No opposition has ever indicated any such position to me. As far as I know, everybody is in favor of it. But if there is opposition, that has not been carried to me.

Mr. BUSH. I don't see how there could be any after looking at some of these pictures here and hearing the testimony. Having experienced a lot of flood damage in areas in which I have lived myself, I think they should all be for it.

Mr. ROGERS. Mr. Chairman, I just want to say that I think this information which our colleague here has given is very helpful, and, certainly, where he has pointed out that 3,600 people right now are being moved out of their homes, it seems to me makes this an imperative project.

Mr. HAYWORTH. I appreciate your position, Mr. Rogers.

Mr. DEMPSEY. Thank you very much.

(The prepared statements of Mr. Hayworth and Mr. Cederberg follow:)

STATEMENT OF HON. DON HAYWORTH, SIXTH DISTRICT OF MICHIGAN, ON SAGINAW RIVER FLOOD CONTROL PROJECT AND GRAND RIVER AT LANSING FLOOD CONTROL PROJECT

Mr. Chairman and members of the Subcommittee on Flood Control, I realize that your hearing this morning is confined to the Saginaw and Kalamazoo Rivers. However, the Sixth District of Michigan is currently the victim of the Grand River, as well as the Saginaw River, and is not touched by the Kalamazoo. I ask your indulgence, therefore, in allowing me to include a few remarks about the Grand River in my statement.

In two separate Army engineers' reports—one on the Saginaw River Flood Control Project; the other on the Grand River at Lansing, Mich.—you will find the following projects included in the improvements recommended:

1. At Flint, on Flint River, to provide for flood protection of areas on both sides of the main stem of Flint River and its tributaries, Swartz and Thread Creeks.

2. Improvement of Grand River and its tributaries at Lansing, Mich., to provide for flood control by enlarging the channel of Red Cedar River.

The need for including these two projects in the proposed 1956 omnibus flood-control bill has been painfully pointed up over the past weekend. It is these same rivers and their tributaries that went on a rampage last weekend, thereby adding the threat of flood to an area already stricken by tornadoes. A double burden was placed on emergency crews trying to assist those injured and left homeless by the twisters, since hundreds of families had to be evacuated from the flood areas.

These floods are not once-in-a-lifetime menaces. They constitute a recurring threat to life and property. The Saginaw River project was approved by the Board of Engineers after 35 years of surveys, studies, and reports by local, State,

and Federal agencies. From the Lansing area I receive letters containing such statements as these:

"We are one of those who experienced considerable property loss during the last flood. In fact, the Red Cedar River, on which our plant is located, is constantly threatening every spring even when there are no unusual weather conditions."

"We have been watching anxiously for some word about flood control, especially in the Grand and Cedar Valleys. We would like to know if there has been any action taken or considered by Congress. Knowing this bill has been in your hands for some time, we dislike feeling it is just waiting for another flood to destroy life and property before being put into action."

The Michigan Legislature has recognized this problem and in 1954 provided enabling legislation to permit creation of water-management districts with all necessary authority to construct, operate, and maintain flood-control and drainage projects in cooperation with the State, the United States, or agencies thereof. With the flood experiences of last weekend still fresh in our minds, I believe you will agree unanimously on the immediate need for including the Saginaw and Grand River projects in your omnibus bill. Thank you for listening to my plea. I hope that I may soon have the opportunity of thanking you for acting on it.

STATEMENT OF REPRESENTATIVE ELFORD A. CEDERBERG ON SAGINAW VALLEY FLOOD CONTROL PROPOSAL

Mr. Chairman and members of the committee, I appreciate the opportunity afforded me to join my colleagues of the Saginaw Valley in supporting that phase of pending legislation which would provide assistance in our program of flood control for that area.

The Saginaw River and tributaries project is a multiple-unit project designed to protect six cities and surrounding countryside against recurring serious losses due to floods.

The Saginaw Valley Regional Planning Commission, the United States Fish and Wildlife Service, and local units of government as well as local organizations and agencies have been actively planning this program for a number of years, and the facts which have been assembled by them and presented through one of my colleagues from Michigan bears out the importance of this project.

Such rivers as the Cass, the Flint, the Shiawassee and the Tittabawassee converge near Saginaw, in the Eighth Congressional District, represented by our colleague, Representative Bentley. These then form the Saginaw River which flows northward through the 10th Congressional District to Saginaw Bay. One of these major rivers and many tributaries are located in the 10th District and these frequently cause a serious flood problem.

Actually, the watershed area includes all or part of 21 counties in the east-central portion of the Lower Peninsula of Michigan and is the largest basin in the State. The total drainage area is comprised of about 6,000 square miles and has a population of 714,000, or more than 11 percent of the total State population.

A number of public hearings have been held by local branches of government as well as by the Corps of Engineers.

The Engineers have made an extensive study of all that is involved and you also have before you other factual statements supported by statistics.

I have gone over the report of the Army engineers and I believe it is sound and I would like to add my endorsement to it. The people of our area will continue to suffer losses each year as spring floods sweep down upon them unless some relief is provided through such a program as proposed by the Army engineers.

I sincerely hope your committee will include this Saginaw Valley project when it reports out the omnibus public works bill now before you.

Mr. DEMPSEY. We will now hear from Mr. A. P. Jensen.

STATEMENT OF A. P. JENSEN, JACKSON, MICH.

Mr. JENSEN. Mr. Chairman and members of the committee, I appreciate a chance to appear before you—perhaps more than some

of these others representing the little fellow, the farmer, in this particular area.

My address on the agenda there shows Jackson, but that is a business address, but my farm address is Marlette, Mich., and I have lived in Sanilac County and the Cass River Flats area for 57 years, and I have done all kinds of menial jobs on the farm, and I can certainly testify that this project is really needed.

Our country there is flat, and it is pretty much the same as in most of the other areas in the Saginaw Valley, and our main problem is too much water. In years of drought, that's when we make our harvest and really get along. But when we have these floods and just generally too much rain, we just don't know what to do with it.

Years ago, when we were farming with horses, you could farm the high parts of a field at one time and get that seeded and so forth, and we would harvest it the same way. But nowadays it is tractor farming, and you just can't do it that way, because you have got to farm the whole thing at the same time.

Practically the main people that are left on the farms are old fellows like myself, trying to get along. I'm not doing it, fortunately, but there are a lot of them left back there, and their boys have gone to the city, and it is hard to get hired help, and it has just cut down to just a few people, and it's just very difficult.

And the thing that accents it now is that fact that we have been stopped from doing any ditching or putting in any drains by injunction. In that whole area in Sanilac Flats—and I think the same thing prevails in a lot of the other districts—there is the fact that we can't dig ditches and empty them into the present ditches if we wanted to, because injunction has stopped us. They have got an injunction on it because of the condition that some of the other gentlemen reported on, the flood condition at the bottom end.

And furthermore, a lot of these big drains like the Cass River drain—which is the one I can speak of particularly because that is the one covered in our area—are filled up with brush and one thing and another, and then there are a few humps between us and the Saginaw Valley or Saginaw Bay where this water eventually goes, and we get a big rain and it maybe gets away a little bit, and then about the third day she starts coming backward again and crowds in over the land. And this happens in the harvest time even when it's dry; water may come backward and come on over the land.

Now, the individual farmer is pretty helpless in being able to do anything about it, and a few of the fellows who have got a little extra money together have dug duckponds on their farms. By that I mean they take an acre or two of land in the lower part of their farm, then take a dredge and dig a ditch around that particular area and throw the dirt inside, and then they would tile into this ditch that they are digging on their own farm, and then they would have a big pump and pump the water over the dikes and into the duckpond and have been able to farm that way and doing it pretty successfully.

But, understand, it's only people with outside income who are able to do that. The individual farmer just can't do it.

And it's a thing that has been needed for many, many years, and especially this particular time when we are talking about all these road projects. You can't build roads unless you get rid of the water, and the water is laying in the soil in all the areas. You can get it out by

tiling and you can get it out by surface draining, but you have to have a place to send it, and, of course, if you are not able to do any more ditching and empty any water into these ditches that are now there, you are in pretty bad shape.

Even these fellows building the duckponds can't drain the duckpond into the present drains because they are prohibited from doing it. They have got to leave it there until it evaporates. And they have been able to do a pretty good job of it.

Now, Congress and you folks down here have been trying to do something for the farmer. We don't want subsidies particularly, but we would like an opportunity to help ourselves. Give us a chance to get rid of the water, and we'll be very, very happy.

Thanks a lot.

Mr. DEMPSEY. Any questions?

Mr. WITHROW. I would like to ask the gentleman a question. How often do you have high water, as a rule?

Mr. JENSEN. Well, particularly the area I'm in—I happen to be in two areas because I'm right on the river flats in one project and there's another one about 3 miles from there where I was raised—once a year, sometimes twice. Right now at the present time they are just flooded there absolutely. They are unable to get anything in or do anything about it.

It's flat, gummy, clay soil, and it's just rough.

Mr. WITHROW. Then you have the high water almost every year?

Mr. JENSEN. Most every year.

Mr. WITHROW. In flood there?

Mr. JENSEN. That's right, but it isn't only the high water that bothers us. It's all year getting the water off of your individual farm, especially if you are back there 2 or 3 miles from the river, and you just can't do anything about it. The water pretty much lays there.

They have a local drain that you get it into, but that fills up and then you're stopped. You can't do anything more about it, and you can't build more drains until the big project goes through.

Mr. ROGERS. Mr. Chairman, Mr. Jensen is a very close friend of mine and has been of our family for many years, and I have heard him speak quite often of the floods in this area.

I just wanted to ask, Mr. Jensen, if you feel the local people have done all that they possibly could to meet this problem themselves before asking the Federal Government to come in and help.

Mr. JENSEN. We're on the Sanilac County Flats. We would start proceedings tomorrow to dig and open up Cass River. We are willing to pay for that and can do it, and we have complete agreement on that situation. We want to get rid of the water in there, and there's a couple of humps over near Cass City and a couple of places there where we can't get over.

Mr. ROGERS. So you feel the only way to work out a feasible plan is that which has been suggested by the Engineers—to make a coordinated plan throughout the valley?

Mr. JENSEN. We're stopped by injunction from doing anything else.

Mr. ROGERS. They won't even let you get rid of the water?

Mr. JENSEN. We can't dig a ditch on our own farm even. We're just stopped.

Mr. BECKER. Who secured the injunction against ditching?

Mr. JENSEN. The people at the lower end.

Mr. BECKER. The people at the lower end? If the ditching was completed, would they be harmed by it?

Mr. JENSEN. What's that again?

Mr. BECKER. They must be expecting to be harmed by it.

Mr. JENSEN. They would be if we put more water over there. They're already flooded now, and if we put more water in there——

Mr. BECKER. So they are justified by their injunction?

Mr. JENSEN. Oh, they are definitely justified. The situation is this: There is more water going in now than they can take care of, and if we put more water in there it becomes accentuated.

Mr. BECKER. I just want to make the point that they are justified in their injunction.

Mr. JENSEN. Definitely. Definitely.

Mr. SCUDDER. Mr. Chairman, Mr. Jensen, isn't your situation quite similar to that in Florida where you have to build levees to get the water out of the area in order to properly cultivate and bring the crops to fruition?

Mr. JENSEN. That's right.

Mr. SCUDDER. In other words, you have to pump the water out of those areas and construct dikes to keep the floodwater out in order to raise crops?

Mr. JENSEN. That's true. We seem to get more water in there. If it rains any place there, it rains there. And we're flat, and we just have to get rid of the water.

Thank you.

Mr. DEMPSEY. Thank you very much.

We have a letter from Milton P. Adams, executive secretary, Water Resources Commission, State of Michigan, in favor of the project, and also we have a telegram from the Superintendent of Public Works at Frankenmuth, Mich., in favor of the project. Without objection, we will place them in the record at this point.

(The documents above referred to follow:)

STATE OF MICHIGAN,
WATER RESOURCES COMMISSION,
Lansing, Mich., May 11, 1956.

Subject: Flood control, Saginaw River (Mich.) and tributaries.

RIVERS AND HARBORS SUBCOMMITTEE,
House Public Works Committee,
New House Office Building, Washington, D. C.

GENTLEMEN: This project is necessary to serve the single largest watershed in this State. It is necessary, proper and in conformity wtih the best development of the valley's land and water resources. The project has been reviewed and approved by this commission.

There are local, minority differences of opinion as to the advisability of the fish and wildlife feature of this project. It is the concensus of members of the commission, however, that any doubts in this connection should be resolved in favor of the project as it comes before you on May 16.

Favorable consideration of this project is strongly recommended to your committee. It is hoped that it may be authorized for construction before Congress adjourns.

This recommendation is made under authority of section 2A of the statute creating this commission, copy of which is attached.

Very truly yours,

MILTON P. ADAMS, *Executive Secretary.*

STATE OF MICHIGAN

WATER RESOURCES COMMISSION

Act 245, Public Acts of 1929
as amended by
Act 117, Public Acts of 1949 [1]

An act to create a water resources commission to protect and conserve the water resources of the State, to have control over the pollution of any waters of the State and the Great Lakes, with power to make rules and regulations governing the same, and to prescribe the powers and duties of such commission; to prohibit the pollution of any waters of the State and the Great Lakes; to designate the commission as the State agency to cooperate and negotiate with other governments and agencies in matters concerning the water resources of the State; and to provide penalties for the violation of this act.

SEC. 1. For the purpose of carrying out the provisions of this act there is hereby created a water resources commission, hereinafter referred to as the commission, which shall consist of the director of conservation, the commissioner of health, the highway commissioner, the director of agriculture and 3 citizens of the State to be appointed by the governor, by and with the advice and consent of the senate, 1 from groups representative of industrial management, 1 from groups representative of municipalities, and 1 from groups representative of conservation associations or interests, for terms of 3 years each; provided, that of the members first appointed, 1 shall be appointed for a term of 1 year, 1 for a term of 2 years, and 1 for a term of 3 years. Vacancies shall be filled for the unexpired term in the same manner as original appointments. Members of the commission shall be entitled to actual and necessary expenses incurred in the performance of official duties. It shall be the duty of the department of administration to provide suitable office facilities for the use of the commission.

Each of the aforesaid State officers is hereby authorized to designate a deputy of his department to serve in his stead as a member of the commission.

SEC. 2. The commission shall organize and make its own rules and regulations and procedure and shall meet at least once each month and shall keep a record of its proceedings. The commission shall protect and conserve the water resources of the State and shall have control of the pollution of surface or underground waters of the State of Michigan and the Great Lakes, which are or may be affected by waste disposal of municipalities, industries, public or private corporations, individuals, partnership associations, or any other entity. The commission is empowered to make or cause to be made surveys, studies and investigations of the uses of waters of the State, both surface and underground, and to cooperate with other governments, governmental units and agencies thereof in making such surveys, studies and investigations. The commission shall assist in an advisory capacity any flood control district which may be authorized by the legislature of this State. The commission in the public interest shall have the right and duty to appear and present evidence, reports and other testimony during the hearings involving the creation and organization of flood control districts. It shall also be the duty and responsibility of the commission to advise and consult with the legislature on the obligation of the State to participate in the costs of construction and maintenance as provided for in the official plans of any flood control district or intercounty drainage district. The commission shall have the authority to, and shall enforce the provisions of this act and shall make and promulgate such rules and regulations as shall be deemed necessary to carry out the provisions of this act. The rules and regulations of the commission shall be promulgated in conformity with the provisions of Act No. 88 of the Public Acts of 1943, as amended, being sections 24.71 to 24.82 inclusive, of the Compiled Laws of 1948.

SEC. 2A. The water resources commission is hereby designated the State agency to cooperate and negotiate with other governments, governmental units and agencies thereof in matters concerning the water resources of the State, including but not limited to flood control and beach erosion control. The commission is further authorized to take such steps as may be necessary to take advantage of any act of Congress heretofore or hereafter enacted which may be of assistance in carrying out the purposes of this act.

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[1] Effective May 18, 1949.

The commission shall report to the governor and to the legislature at least once in each year any plans or projects being carried on or considered and shall include in such report requests for any legislation needed to carry out any proposed projects or agreements made necessary thereby, together with any requests for appropriations.

SEC. 3. The commission shall be authorized to bring any appropriate action in the name of the people of the State of Michigan, either at law or in chancery as may be necessary to carry out the provisions of this act, and to enforce any and all laws relating to the pollution of the waters of this State.

SEC. 4. The commission or any agent duly appointed by it shall have the right to enter at all reasonable times in or upon any private or public property for the purpose of inspecting and investigating conditions relating to the pollution of any waters of this State. The commission shall have the right to call upon any officer, board, department, school, university or other State institution and the officers or employees thereof for any assistance deemed necessary to the carrying out of this act.

SEC. 5. The commission shall establish such pollution standards for lakes, rivers, streams and other waters of the State in relation to the public use of which they are or may be put, as it shall deem necessary. It shall have the authority to ascertain and determine for record and in making its order what volume of water actually flows in all streams, and the high and low water marks of lakes and other waters of the State, affected by the waste disposal or pollution of municipalities, industries, public and private corporations, individuals, partnership associations, or any other entity. It shall have the authority to make regulations and orders restricting the polluting content of any waste material or polluting substance discharged or sought to be discharged into any lake, river, stream, or other waters of the State. It shall have the authority to take all appropriate steps to prevent any pollution which is deemed by the commission to be unreasonable and against public interest in view of the existing conditions in any lake, river, stream, or other waters of the State.

SEC. 6. It shall be unlawful for any person to discharge or permit to be discharged into any of the lakes, rivers, streams, or other waters of this State any substance which is injurious to the public health or to the conducting of any industrial enterprise or other lawful occupation; or whereby any fish or migratory bird life or any wild animal or aquatic life may be destroyed or the growth or propagation thereof be prevented or injuriously affected or the value of lawfully taken fish or game be destroyed or impaired as the consequence of said pollution. Any person who shall discharge or permit to be discharged any waste or pollution into any of the waters of this State, in contravention of the above provisions of this section, shall be deemed to violate the provisions of this act.

SEC. 7. Whenever in the opinion of the commission any person shall violate or is about to violate the provisions of this act, or fails to control the polluting content or waste discharged or to be discharged into any waters of the state, the commission may notify the alleged offender of such determination by the commission. Said notice shall contain in addition to a statement of the specific violation which the commission believes to exist, a proposed form of order or other action which it deems appropriate to insure correction of said problem within a reasonable period of time and shall set a date for a hearing on the facts and proposed action involved, said hearing to be scheduled not less than 4 weeks or more than 8 weeks from the date of said notice of determination. Extensions of the date of hearing may be granted by the commission or on request. At such hearing any interested party may appear, present witnesses and submit evidence. Following such hearing, the final order of determination of the commission upon such matter shall be conclusive: *Provided*, That such order may be reviewed de novo in the circuit court for the county of Ingham, in chancery, or for the county in which such alleged violator resides, or for the county in which said alleged violation occurred, upon petition therefor, filed within 15 days after said final order of determination.

SEC. 8. (A). Whenever any person shall feel himself aggrieved by the restriction of polluting content or waste, or pollution, or any other order of the commission, he shall have a right to file a sworn petition with the commission, setting forth the grounds and reasons for his complaint and asking for a hearing of the matter involved. The commission shall thereupon fix the time and place for such hearing and shall notify the petitioner thereof. At such hearing the petitioner and any other interested party may appear, present witnesses and submit evidence. Following such hearing, the final order of determination of the commis-

sion upon such matter shall be conclusive: *Provided*, That such order may be reviewed de novo in the circuit court for the county of Ingham, in chancery, or for the county in which such alleged violator resides, or for the county in which such alleged violation occurred.

(B). Coincident with the effective date of this amendatory act, it shall be the duty of any person then or thereafter requiring a new or substantial increase over and above the present use now made of the waters of the state for sewage or waste disposal purposes, to file with the commission a written statement setting forth the nature of the enterprise or development contemplated, the amount of water required to be used, its source, the proposed point of discharge of said wastes into the waters of the state, the estimated amount so to be discharged, and a fair statement setting forth the expected bacterial, physical, chemical and other known characteristics of said wastes. Within 60 days of receipt of said statement, it shall be the duty of the commission to make an order stating such minimum restrictions as in the judgment of the commission may be necessary to guard adequately against such unlawful uses of the public waters as are set forth in section 6 above. If the order is not acceptable to the applicant, he may request a hearing on the matter involved, following which the commission's final order of determination in this connection shall be conclusive: *Provided*, That such order may be reviewed de novo in the circuit court for the county of Ingham, in chancery, or for the county in which such alleged violator resides, or for the county in which said alleged violation occurred, upon petition therefor, filed within 15 days after such final order of determination is adopted: *Provided further*, That failure to comply with the final order of the commission under this section of the act shall not be considered a violation of this act unless and until such failure results in pollution contrary to section 6 of this act.

SEC. 9. Any duly appointed agent of the commission shall have authority to enforce the provisions of this act and may make criminal complaint against any person violating the same. After service of a written notice of determination setting forth specifically any violation of this act, any person who shall fail to comply with the order of the commission shall be subject to the penalties of this act.

Any person who wilfully violates any provision of this act or any restriction, regulation or final order of determination of the commission made thereunder, shall be subject to a penalty of not to exceed $500.00 per day for each and every day of such violation, such penalty to be recovered in a suit in the circuit court.

SEC. 11. Wherever the word "person" is used in this act, it shall be construed to include any municipality, industry, public or private corporation, copartnership, firm or any other entity whatsoever. Wherever the words "waters of the state" shall be used in this act, they shall be construed to include lakes, rivers and streams and all other water courses and waters within the confines of the state and also the Great Lakes bordering thereon.

SEC. 12. This act shall not be construed as repealing any of the provisions of the law governing the pollution of lakes and streams, but shall be held and construed as ancillary to and supplementing the same and in addition to the laws now in force, except as the same may be in direct conflict herewith.

SEC. 12A. The provisions of this act shall be construed as supplemental to and in addition to the provisions of Act No. 316 of the Public Acts of 1923, as amended, being sections 261.1 to 277.10, inclusive, of the Compiled Laws of 1948; and nothing in this act shall be construed to amend or repeal any law of the state of Michigan relating to the public service commission, the department of conservation and the department of health relating to waters and water structures, or any act or parts of acts not inconsistent with the provisions of this act.

FRANKENMUTH, MICH., *May 15, 1956.*

HOUSE PUBLIC WORKS COMMITTEE,
Congress of the United States,
House of Representatives, Washington, D. C.:

The taxpayers of the village of Frankenmuth are very much interested in the Saginaw Valley flood-control plan and wildlife refuge project. We solicit your favorable consideration. Frankenmuth has gone ahead and constructed, with local funds, a considerable portion of the proposed local flood-protection works

called for in the plan, in order to obtain interim protection from severe flood loss suffered almost annually. We definitely want this project to become a reality.

HERBERT L. KEINATH,
Superintendent of Public Works.

Mr. DEMPSEY. The next witness is Mr. Neberle, who is in opposition to the project.

STATEMENT OF AUGUST J. NEBERLE, SAGINAW, MICH.

Mr. NEBERLE. Mr. Chairman, gentlemen of the committee, I feel like a man walking into a lion's den after hearing all this very fine testimony.

Mr. DEMPSEY. Please be seated.

Mr. NEBERLE. I would be very happy to stand if you don't mind.

I would like to suggest a few questions. One question that comes to mind is whether or not the reservoir in the Shiawassee Flats adds a single acre to the reservoir which is now there, the natural reservoir that is now there. That is one question that comes to mind in hearing some of the testimony.

I believe the answer to that question will be "No," that the reservoir will actually reduce the acreage.

I call your attention to the third reservoir that is mentioned, which I believe is called the Big Prairie Farm, which was diked many, many years ago by the Michigan Sugar Co., which exists today, which is being farmed today. Its dikes are being maintained today. And when we have a genuine flood in the area, those dikes usually give way. And, as the Army engineers have pointed out in their report, they constitute the third natural flood reserve there.

I mention that because there has been considerable controversy in the first place in regard to the wildlife matter. One of the gentlemen who appears with me, Mr. Herbert J. Dietrich, is the present drain commissioner of Saginaw County. Upward of 10 to 15 years ago, he was one of the men responsible for the Saginaw Valley Planning Commission. He worked diligently for flood control. He owns land which is presently flooded. Mr. Dietrich is here in opposition to the project, although he is a proponent of flood control.

One of the reasons for the opposition has been the wildlife conservation department of Michigan's proposition to establish what they call a wildlife refuge. There will be 30,000 geese and 250,000 ducks anticipated in 4 or 5 years from now.

Well, I say to this committee that this refuge, this Shiawassee Flats area, today is and has been for many years past a beautiful, natural, duck or wildlife area. I personally owned 167 acres in that area. I own the hunting rights to that land today because it was so good. The Old Widow's Hole, the best land in that whole area, is in that property.

Now I mention that—I want to add to it—the wildlife project is in a sense well underway, well beyond flood control. It's been stated that it would go on regardless of flood control. The Federal Service have already purchased considerable acreage of land. The exact figure I have here. The United States Fish and Wildlife Service has purchased 3,231 acres of this land. The State of Michigan has al-

ready purchased 4,149 acres of this land. The State of Michigan finances its purchases through the conservation department by Pittman-Robertson money. That is the source of this refuge money. The Federal Wildlife Service, as I understand it, secures its money from the duck-stamp sale, to which I am a contributor. I don't hunt ducks today, but at least I like the stamps. They will have sufficient income through those same funds, which purchased in excess of 7,000 acres now, to purchase the balance of the 20,000 acres they want today.

I call your attention that the original proposal of the engineers proposed a basin of only some 4,000 acres that were to be under water. That acreage today is in excess of 20,000 acres, with one thing: a good bumper boundary around this refuge of high land to prohibit access except through the regular channels of the governing authority, which is very fine. I approve of it highly.

But those agencies will have sufficient income to have their refuge from their own funds, pay for them without taking advantage of the farmers who are opposed to this project.

I have been told by representatives of those agencies that they are not going to threaten people that "we'll take your land by condemnation or anything of that nature; we'll pay you the price we think it's worth." But rather they're going to take their time now and acquire it piece by piece in a reasonable manner, just as you and I would have to acquire it if we were to purchase it. In other words, they are treating these people in the manner in which a purchaser should treat them. They're going to pay them a fair price when they are willing to sell.

And as a sportsman, I believe that that land for that purpose should be purchased in that manner so that our relationship with the farmers and continguous landowners is friendly instead of just the opposite, and it has been just the opposite in the area—one of the reasons for the tremendous opposition to this project.

Now I have a statement which I have prepared, which I would like to file with the committee if I may interrupt myself at this point.

Mr. DEMPSEY. Surely.

Mr. NEBERLE. I likewise have communications from the Shiawassee Flats Agricultural Association, which is an organization of farmers and landowners who in the beginning sought flood control in that area, and I would file that with the committee.

I likewise have a resolution from the Swan Creek-James Farm Bureau which is being filed with the committee.

Mr. BECKER. Are these letters in opposition?

Mr. NEBERLE. The letters all contain resolutions in oppositon to the project.

Likewise one from the Saginaw County Farm Bureau, a resolution in opposition to the project.

(The statements above referred to follow:)

WASHINGTON, D. C., *May 16, 1956.*

Subject: Saginaw River, Mich.

PUBLIC WORKS COMMITTEE,
House of Representatives,
Washington, D. C.

The Shiawassee Flats Agricultural Association, the Swan Creek-James Farm Bureau, and the Saginaw County Farm Bureau have each stated their opposi-

tion to the proposed flood control and fish and wildlife project. Each of these organizations has requested me to deliver their respective resolutions to this committee, and I would like to do so at this time. You will note that each organization has requested and authorized Mr. Herbert J. Dietrich and A. J. Neberle to appear before this committee to more fully express their views.

Mr. Herbert J. Dietrich is the present Saginaw County drain commissioner and has lived on land abutting a tributary of the Shiawassee River for 40 years and is familiar with the flood situation from actual experience. A part of his farm is now under water because of the late spring rains which we had in the area, and which we hope are now at an end so that the local farmers will still have time to plant their crops for this growing season.

The speaker, A. J. Neberle, a former prosecuting attorney of Saginaw County, resided on the banks of the Cass River at Bridgeport for 20 years, owned lands in the Shiawassee Flats area and has knowledge of the Saginaw River and its tributaries through actual experience.

This background of the representatives of the named farm organizations is given, so that this committee will understand why these spokesmen were selected to appear before you.

The major objection to the proposed flood control and wild life project is the fact that a greatly increased acreage will be drained more quickly into the Saginaw River without providing an adequate outlet through the Saginaw River. The Saginaw River, south of the Court Street Bridge in Saginaw, has a present average depth of about 10 feet at normal water level. This section of the river is a major cause of floods in the area because it holds back the waters of all the other rivers. This was demonstrated by the recent freshet, the waters of which are just now receding. No provision is made in the present proposed flood-control plan for clearing out of the Saginaw River. To overcome this situation, the Saginaw River should be cleaned out from the Sixth Street Bridge in Saginaw south to a point where the Cass River, the Flint River, and the Tittabawassee and Shiawassee Rivers enter the Saginaw River.

The Saginaw Valley high waters are caused by (1) excessive rains and (2) by sudden melting of ice and snow. The proposed project will add a possible third cause resulting from bursting dikes and/or reservoirs.

The second major objection is that the proposed flood-control improvements in the Shiawassee Flats are not feasible and not justified. The views and recommendations of the Board of Engineers for Rivers and Harbors, dated April 30, 1954, contains substantially the above statement on page 7, paragraph 8.

The Office of the Chief of Engineers on July 8, 1942, in its report to the Secretary of War, submitted by Major General Reybold, Chief of Engineers, stated the following in regard to the Saginaw River:

"After due consideration of these reports (district and division engineers) I concur in the views of the Board (Board of Engineers for Rivers and Harbors) that flood control measures on the Saginaw River, Mich., are not economically justified. I therefore recommend that no improvement for flood protection be undertaken by the United States at this time."

In 1937 the United States War Department made a preliminary examination of the valley's problems, considering primarily flood disaster menace rather than the related but separate problems of soil erosion and land improvement, and came up with a report from its Great Lakes division engineers that: "The probable cost of any feasible plan for flood control in the Saginaw River Valley far exceeds the benefits which can be determined at this time."

After the 1916 flood, Lyman Edgar Cooley, an eminent engineer of the day studied the situation and concluded the only practical way to protect valley farms, villages, and cities would be to dredge the Saginaw River to a 24-foot depth all the way from the Tittabawassee-Shiawassee confluence to the Saginaw Bay.

We have chosen the dates 1916, 1937, 1942, and 1954 to review at this point the changes which have occurred in the valley water problem.

The first change is the fact that the Tittabawassee River no longer freezes over in the winter. The large Dow Chemical Plant at Midland contributes heat and chemicals to the river which have caused it to remain practically free of ice during the winter, thus removing a former flood cause.

The second change is in the Saginaw River which, because of industrial development along its banks from the Center Street Bridge north, no longer freezes over in the winter to any extent. This also has relieved part of the flood danger.

The Saginaw River channel has also been deepened to about 16 feet from the Court Street Bridge north to Sixth Street Bridge, and to about 21 feet from Sixth Street Bridge into Saginaw Bay. Further deepening of the Saginaw

River channel has been authorized from Sixth Street into Saginaw Bay. As a result of these changes in the Saginaw River, it is better able to take water today than at any time in the past.

Despite favorable changes which have occurred in these rivers with the passage of time, the failure to clean out the Saginaw River from the Sixth Street Bridge to the confluence of the Tittabawassee and Shiawassee Rivers leaves the present project without an adequate outlet. Under these circumstances, improvements in the upstream areas would only result in more water into an already inadequate outlet.

Lt. Col. John D. Bristor, Detroit district United States Army Engineer, stated on March 23, 1951: "There can be no improvements above that will pour more water down on the Shiawassee Flats area and the city of Saginaw without some provisions being made for disposition of that water."

Farmers in the area are willing to accept the usual spring and fall flooding in the area. The relief they require is a quick runoff of the high waters occurring during the growing season.

Deepening of the river channel as suggested in 1916 would accomplish this result.

Another objection to the project is that it involves the unnecessary expenditure of moneys in the Shiawassee Flats area. The area is a natural storage basin (report Apr. 30, 1954, p. 2), and in its present condition a fine nesting place for wildlife. This project does not add a single acre to the natural storage area. The only part of the project which is feasible is the deepening and widening of the Shiawassee River channel. To expend funds for any diking in this area to store water or for any other purpose when the area is already a fine natural storage area would seem to be a waste of both Federal and local funds.

With reference to upstream projects, it may be stated that they could all be solved on a purely local basis by local action and local funds. Without Federal assistance Frankenmouth has already practically completed their required work without outside assistance. Other counties could do the same. The improvement of the Saginaw River, as suggested, should be a Federal project, inasmuch as it is navigable water.

In this connection it might be mentioned that the possible construction of two low-level bridges in Saginaw at Bristol Street and Machinaw Street should be restudied by Federal authorities in view of the possible industrial expansion of the area south of the Bristol Street Bridge. To cut off future navigable water in this manner would seem to be contrary to all interests involved, including the people who propose it. Low-level bridges would certainly also increase the cost of future dredging of the river for flood-control purposes.

The United States Fish and Wildlife Service has already purchased 3,231 acres of land in the Shiawassee Flats area, and the conservation department of the State of Michigan has purchased 4,149 acres. The waterfowl refuge is now accomplished in part and can grow as fast as the State of Michigan receives Pittman-Robertson money and the United States Fish and Wildlife Service receives Federal duck stamp money. As owners of the land, the United States Fish and Wildlife Service and the Michigan conservation can make whatever improvements may be necessary from the funds they have available. Their project can be completely accomplished without the flood-control project.

Sportsmen, in an attempt to improve their project through an expensive flood-control project which local farmers object to, only create ill will and defeat their own purposes. This, I am sure, they do not desire.

A few but not all of the objections have been mentioned to show they are meritorious. Others, such as loss of local tax revenues, high maintenance cost of dikes, failure to carefully study diversion of floodwaters from the upper reaches of the Cass River 17 to 19 miles to Lake Huron instead of sending them 105 miles through the Saginaw Valley, study of the possibility of diverting upper flood waters of the Tittabawassee to the Saginaw Bay, failure to provide for upstream impounding of water, failure to include soil conservation and water conservation in the planning of this project all are valid objections.

All these objections to the present project leads to the conclusion that there must be a better solution. A restudy of the problem of the entire area could result in the program acceptable to all and would probably include the following:

1. Clean out and deepen the Saginaw River from Sixth Street Bridge to the Tittabawassee-Shiawassee confluence.

2. Clean out Cass, Flint, and Shiawassee Rivers as required.

3. To impound, wherever practicable, upstream waters to prevent rapid runoff and to raise the local water table.

4. To reforest stream banks and encourage good conservation practices to prevent soil erosion.

5. To restudy the commercial shipping and industrial development potential of the Saginaw River and its tributaries in view of the apparent need of a clean-out of the Saginaw River south of the city.

6. To determine projects in the valley which should be accomplished by the Federal Government and those which should be accomplished by local action.

Respectfully submitted.

A. J. NEBERLE.
H. J. DIETRICH.

MAY 11, 1956.

HOUSE PUBLIC WORKS COMMITTEE,
House of Representatives, Washington, D. C.

GENTELMEN: The Shiawassee Flats Agricultural Association, an organiaztion of farmers and landowners in the Shiawassee Flats area, held a meeting on May 3, 1956, and went on record as unanimously opposing the Saginaw Valley flood-control project which is now before your committee for appropriation.

The members of our organization, as a group, are more directly affected by the project than any other group in the watershed. We have men who are better qualified and able to analyze the valley water problem than any other groups or individuals. We oppose the project for the following reasons:

No provision has been made to improve the outlet, namely the Saginaw River, which is the bottleneck of the whole Saginaw Valley water problem.

No provision has been made to control any of the water at its point of origin. The proposed storage in the Shiawassee Flats area to control the water of the entire basin, creates a hazard for agricultural and residential property which has never been affected by floodwaters.

No provision has been made for water diversion on the Cass and Tittabawassee Rivers which was deemed essential in the original Army engineers survey.

The original survey provided approximately 4,000 acres of land as adequate for storage with diversion until the Federal Fish and Wildlife Service entered the project. The storage required then was raised to 11,000 acres, then to 16,000 acres, and then to the now proposed 23,259 acres. This increase in storage acreage will consume unnecessarily several thousand acres of valuable farmland rated with the best in the world. We feel that the apropriation of this land for wildlife purposes would be a misuse of this fertile agricultural acreage.

The Sanilac Flats area originally included in the project was about 7,000 acres. This has been increased under the present plan to 173,000 acres. It is proposed that the water of this low-flood Sanilac Flats area be drained into the Shiawassee Flats area. This water will travel approximately 105 miles to reach the Saginaw Bay when the same could be diverted a few miles to natural waterways which have their outlet in Lake Huron.

The tentative assessments for the project assess Saginaw County with 66⅔ percent of the cost of the local share of the project for which Saginaw County receives the least benefit and all the water. The remaining 33⅓ percent is assessed to the balance of the counties in the project who dispose of all their water and derive all of the benefit. The legislation passed by the Michigan State Legislature does not give Saginaw County adequate representation in the matter.

We feel that the flood and drainage problem of the valley can be solved to the best advantage of all concerned by local action. The presently proposed project which embraces the principals of flood control used by the Army engineers in other parts of the country does not solve the problem of the Saginaw Valley watershed. The cost of the same is excessive and, as it does not solve the problem involved, it should be deleted from the appropriation bill.

We further hereby request and authorize Mr. Herbert J. Dietrich, the Saginaw County drain commissioner and/or A. J. Neberle, the former prosecuting attorney of Saginaw County to appear before your committee to further explain our views.

WILFORD ROOT,
President, Shiawassee Flats Agricultural Association.

We know that this year's omnibus flood-control bill is up before this committee

MAY 13, 1956.

HOUSE PUBLIC WORKS COMMITTEE,
Washington, D. C.

GENTLEMEN: At a meeting of the Swan Creek-James Farm Bureau held March 15 we voted unanimously to oppose the Saginaw Valley flood-control program for the following reasons and to endorse H. J. Dietrich and A. J. Neberle as spokesmen for our organization.

Water from the Sanilac Flats area, comprising 173,000 acre watershed, which is only 17 miles from Lake Huron is being diverted 75 miles west down the Cass River into the Shiawassee Flats area, which is already overburdened at flood stage.

No provision is made for cleaning and deepening the Saginaw River which is the only outlet for the entire watershed.

Said plan overlooks diversion of the Tittabawassee River above Midland and of the Cass River. Both diversions would help immensely to give relief to the Flats area in time of high water.

As the project now stands, it is of no help to Saginaw County. Saginaw County is nothing but a catch basin for all the water the remaining counties of said project feel free to dump on us. We stand the biggest share of the cost and receive the least benefit. As for the townships of Swan Creek and James, they stand to lose land off the tax roll that is badly needed for tax purposes to operate schools.

Individual farmers will have their land taken away from them and their farms cut up. Lands bordering on the project will have to either pump their water over the dikes at their own expense or form drainage districts and levy special assessments to pay for pumping and operating cost to get their water inside the dikes, which would be an added expense which they do not have to contend with now as their water is taken care of naturally.

The Saginaw County Farm Bureau has adopted a resolution as being against said project. The Saginaw Board of Supervisors have not endorsed said project. A petition with approximately 500 signatures of valley residents all opposing the flood-control plan has been sent in to Congressman Bentley. The Shiawassee Flats Agricultural Association, an organization of farmers in the area, is also on record as being opposed to the plan as it now stands.

Enabling legislation passed by the Michigan State Legislature does not give Saginaw County enough representation or protection.

We trust you will give these our views and facts proper consideration when this project comes before your committee.

Yours truly,

NICHOLAS G. BENKERT,
Chairman, Swan Creek-James Farm Bureau.

SAGINAW COUNTY FARM BUREAU, INC.,
Saginaw, Mich., May 14, 1956.

HOUSE PUBLIC WORKS COMMITTEE,
Washington, D. C.

GENTLEMEN: At the regular meeting of the Saginaw County Farm Bureau Board of Directors, held April 26, 1956, discussion was held again on the Saginaw Valley flood-control project.

It was moved and supported that the county farm bureau secretary again write to the proper persons in Washington, and bring to mind that the Saginaw County Farm Bureau, Inc., is opposed to this bill.

At the annual meeting of the Saginaw County Farm Bureau, held October 25, 1954, the following resolution was passed by the members and sent on to the office of Alvan M. Bentley, Member of Congress, as follows:

Whereas Saginaw County will be assessed approximately two-thirds of the Saginaw Valley flood project cost; and

Whereas the remaining 20 counties involved who derive all the benefits would pay only 33½ percent of the cost; be it therefore

Resolved, That Saginaw County Farm Bureau goes on record as opposed to the 66½ percent tentative assessment to Saginaw County.

It was further brought out that this would take up about one-half of James Township, and would make Saginaw County just a dumping grounds.

We know that this year's omnibus flood-control bill is up before this committee in May of 1956, and we do want you to know that we are opposed to this project.

The Saginaw County Farm Bureau also endorses that Herbert Dietrich, and August J. Neberle, act as spokesmen, for their organization.

Sincerely,

ETHEL N. FULLER, *County Secretary.*

Mr. SCUDDER. It might be well to highlight this information.

Mr. NEBERLE. I will, if you please, sir.

Mr. SCUDDER. It will be some time before we have the report before us.

Mr. NEBERLE. Yes, sir.

Mr. DEMPSEY. Do you want to give us the substance of these various letters you have put in?

Mr. NEBERLE. The objections that are contained in these resolutions I will refer to, if I may, in the continuation of my argument against, if it please the committee.

Mr. DEMPSEY. All right.

Mr. NEBERLE. I think a point has been made all through the testimony here that this has been a flood area or an area which is inundated, usually spring and fall, and has been since the beginning of time. The condition is there today. The lowlands, the swampy lands; they flood.

It has also been indicated that progressive people can take care of themselves. I think the matter of the duck-pond-diking, throwing up a bank, pumping water into the dike, holding it on the farm for use in drought periods if necessary, is a wonderful conservation possibility.

And in that connection, speaking of conservation, the present plan of the Army engineers is to dike this basin. In that plan to my knowledge, and it's somewhat limited—I have lived on this watershed almost all of my life. I was prosecutor of Saginaw County. I went up and down the Cass in a rowboat through the Shiawassee as a young man and hunted ducks, so I'm quite familiar. I lived on the Cass for many years.

The plan is to dike back all these rivers, including the Shiawassee, to deepen them, possibly widen them, straighten them, and then throw up dikes to retain the water.

As I mentioned, we have two—spring and fall—floods. Usually the spring is runoff of the ice and snow together with warm weather, sometimes coupled with rain. In the fall it's rain. Those are two reasons for inundation of lowlands today. When this dike system is put in—for the reasons I will state—we will have a third possible cause of—what this time? A large head of water, a flood, bursting out of dikes, bursting out of reservoirs, a flood in a true sense, not a gradual rise of water as we have now when we have rain.

And the reason I mention that point, the Saginaw River has been cleaned, a channel has been constructed, an average depth of about 16 feet, from the present high-level Court Street Bridge in Saginaw to the Sixth Street Bridge. There has also been a turning basin for medium-sized lake freighters. From the Sixth Street Bridge through the Saginaw River into the lake channel there is a boat channel into the lake to clear them into the lake, which is some 20 feet, more or less, deep at the present time.

That channel I think is authorized now to be deepened in excess of 30 feet. I think the channel is some 200 feet wide.

But I ask the question: What work if any has been done from the Court Street Bridge up to the Shiawassee Flats project? There is a plug, gentlemen. We had an engineer when they surveyed the Mackinaw Street Bridge site. The average depth of the water in the Saginaw River at that point through that stretch is 10 feet. Ten feet.

In 1916 Saginaw had a flood. The entire business district was inundated similar to Flint's situation. Flint has a flood. And I have often asked myself there why don't they spend a little money and do something? Because it's just through the city of Flint, basically.

But Saginaw had such a flood. At that time, Saginaw-minded people secured an eminent engineer of that day—Mr. Cooley. That was in 1916. I mention his full name in the statement. And he at that time said, "There is one solution to the Saginaw Valley flood problem, and that solution is a 24-foot-deep channel from the confluence of the Cass, the Tittabawassee, and the Shiawassee Rivers out into the bay."

Now, I call your attention to that fact that between this project and the Court Street Bridge—and from Court Street down it only has a 16-foot-deep channel, and it's silted in considerably so it's less—is the plug in the whole project.

We have heard talk of injunction here. I beg to differ with some of the gentlemen, and I challenge them to prove their assertions that there are existing injunctions on the Cass River by lower municipal bodies. I don't know of private injunctions. Anybody can have a lawsuit against his neighbor to stop the water going on over, and so on. But I speak of municipal bodies who are interested.

I know of only one injunction that Saginaw County has, and that involves Mystigue Creek. And that's in this entire watershed. It involves the Mystigue Creek. And when they start the work in the manner in which it should be done, that injunction automatically falls aside.

The injunction point, however, I think is well taken in this project, because I can readily see that if an attempt is made to construct it as it now stands, dike it, go way up in the Sanilac Flats, which is only some 17 miles, for connecting water to the lake, bring that Sanilac Flats water down 105 miles substantially through the Saginaw Valley—and I ask myself "Why?"

These things have been presented to the Army Engineers. We had a man by the name of Gibson who was at the head of the valley control commission, the real keyman of that commission, and men like Mr. Herbert Russell of Saginaw, Mr. Randall Wickes, who was originally on the commission. They no longer attend it. The board of supervisors stopped appropriating any money to keep the thing alive, because it went all over the map.

The situation then—getting back to the project—leaves that plug in there. I think if it's commenced that any citizen affected adversely by the water because of that plug could by injunction stop any progress in the matter.

Now, I would refer to the pictures. I have pointed out the natural reservoir in the Shiawassee Flats. Representative Bentley has told you the picture he took was 3 years old, that at the present time those flats are entirely covered. Those flats are at the beginning, in a sense, of the Saginaw River. They are just above the plug I'm talking about. And the reason for the inundations we have now is that we never fol-

lowed the advice of Mr. Cooley and we never cleaned out the river. And today in Saginaw they are talking about two low-level bridges, and I think the Congressional committees involved and the engineers have been asked to approve or are being asked to approve a low-level bridge in the middle of Saginaw, when just a few years ago they built a high-level bridge designed with a span that could be raised south of or upstream from the low-level bridge.

I think if they did serious thinking and realized that the possible solution of this flood-control project realistically is that a 24-foot-deep channel recommended in 1916 after a flood, that possibly then they would realize that the Saginaw River will be navigable from the bay to a point south of Saginaw and open up a vast industrial area there, because the flood control project—it's gone many years. Money may be available. It can be done. And I speak now of the Shiawassee-Saginaw situation.

With reference to the other projects, Frankenmuth, a letter of endorsement here, this project. Well, I say "amen" to Frankenmuth. I don't know what authority the superintendent of public works has to do such a thing, but I say this: Frankenmuth is a progressive community. They put up with these floods for many years. They were hoping that this project would go through so they wouldn't have to spend any money. But what did they do? They rolled up their sleeves, took their own money and they built their dikes, and they have practically completed the very project that is in this. Practically completed. Did it themselves.

Now, I ask: Why can't Sanilac Flats get off its seat and start driving and do something about their problem? Why can't the other communities? There are seven separate projects. Owosso is big enough to do the few thousand dollars worth of work that is required there to alleviate their situation. Flint, with General Motors and the tremendous industrial resources there, is big enough to raise a few million dollars to alleviate their situation. It's just in downtown Flint, because they have got a river going through it about as wide as a crackerbox.

All of those local situations, each one in turn, is a local project which could be handled by local funds, with one exception, and that is the cleaning out of the Saginaw River from the confluence of the Tittabawassee and Shiawassee, which should be a Federal project on the basis that it is a part of your navigable waters.

You have cleaned out the Saginaw River channel from Sixth Street down. You're going to widen and deepen it now. You cleaned it out up to Court Street. Then why shouldn't the entire channel—it's large enough for navigable ships—be constructed? And then possibly we'll have the flood relief right there in one piece.

As far as the cleaning out of the Flint, the Cass, the Shiawassee in there, that can be done by local project. They can be taken one at a time.

Now, I mention the flood. Much has been said. We have got a flood up there now; a state of emergency. Well, the pictures are there. Gentlemen, the water is on that land, so help me, spring and fall, year in and year out, and it isn't half as bad normally as it is right now.

As far as the farmers are concerned, they were talking about emergency up there. They've still got time to plant—if what? If that

And again I ask directly the question: Is there one acre, a single

water would run out. There's the difficulty again. It's the backup of that plug in the river that holds that water there.

All of these pictures are within a couple of miles of the plug I'm talking about. That's why the water is there. It can't get over that. There are sandbars in there. That's an average depth, I mentioned, of 10 feet. There are sandbars in there that practically amount to dams. And there's your situation.

The farmers in that area—and, as I say, I owned land down there myself. Mr. Dietrich owns land now.

I'd like to point to one of these pictures if I may. I would like to point to this picture, the Cass River dam 13 in 1956. It looks that way now, gentlemen, if I may show it. This field that you see last year had a beautiful crop of beans. A man by the name of George Shem operates that farm, and he's a farmer like the highest and finest musician. Last year he had beans. The weather was wonderful. He had a superharvest.

What did he do this year? Certified wheat for seed. Again he's playing that organ, because I think when that water goes down, if we don't have extreme hot weather, he's going to have his wheat crop—if that water gets out soon enough.

Now, with reference to this flood condition, I say this: Shem is a smart farmer. He had his crop planned, and he had the right crop for the weather. The fellow who didn't get out and plant, he couldn't plant and he hasn't been able to plant all spring because every second or third day we had another downpour. They couldn't run a machine on the land.

I might add the farmers in that area have lived there for many years. They are used to these floods or inundations. I won't call them floods. The water simply rises in the river, and then it goes down in a couple of days as a rule. The spring and fall freshets they don't mind at all. That doesn't bother them. And all they need for these others when they come is to get them out in a hurry, and the cleaning out of the Saginaw River would accomplish that.

The opposition feels that the engineer in digging out, building big dikes with I think some $700,000 of maintenance a year, almost equal to the losses—you lose a little crop or you pay it out in maintenance of dikes. It's the same difference; and that they oppose. Because they realize those dikes in that area are going to burst when they are under greatest tension, and then their land is really going to be washed away, and that is a danger.

As I say, they are used to accepting that spring and fall water, and they have a firm belief that if the river channel were cleaned up to the confluence of those rivers—and, as I mentioned, these photographs are only a very short distance away from the big river—that this water would be gone. And for that reason they oppose the project.

And again I reiterate the question with reference to the wildlife. I will show you the picture of the storage area, and I believe you will see its tremendous acreage under water. Now, the Engineers propose to put dikes in that acreage—to do what? To hold the water in February, March, and April, and then let it go as the river can take it. Well, if that had been in being today, we'd have more water than the present flood or the present inundation by reason of the storage in the reservoir. We actually lose storage capacity.

And again I ask directly the question: Is there one acre, a single acre, of reservoir added by the expenditures to fix up wildlife for the Government? And as a wildlifer, I think we ought to pay for it instead of the farmer.

I don't think I have possibly covered many points. There have been many things. The wildlife refuge takes property off the tax rolls. Well, unfortunately, with a Government body, when they buy land it comes off the tax rolls. The wildlife people said, "Yes; but we're going to give you back 25 percent of the profit." They're buying this land. They're going to rent it out to farmers. They're going to plant cover crops for ducks. Twenty-five percent. The rest they are going to sell. That comes back to the county. And they point out the land is only taxed—that the tax revenues, county, are only about $8,000 or $9,000. And they imply you're going to get a lot more back.

Well, that isn't the total tax dollar. That's county, yes; but where are the schools, the townships, the other units, for one?

Secondly, they just made that big 25-percent payment a short time ago on some 7,000 acres that they have already got. What do you think it was? $525. It isn't enough to drive the school bus back and forth.

And, as I say, that's what they are faced with now with this wildlife.

Why should they again pay for wildlife through a whole system of dikes when no dikes are required? All that's needed here is an outlet as far as the Shiawassee area is concerned. If you build the dikes—and there are dikes out there now. There are dikes in this picture that a man who thought himself a millionaire broke himself with. I helped him buy the land on a 1,500-acre ranch that the State owns today—wildlife, I believe. They've got it now. He spent thousands and thousands of dollars on dikes. Every time there was a flood there, there were holes in the dikes. They couldn't hold it. The nature of that soil is such that it's about the richest soil in the world. It's so friable it doesn't build a dike. It's so full of vegetable matter it just won't do it. When water gets on it, it falls apart.

These dikes I speak of which wildlife thought a great deal of were under water the other day just enough so that when that terrific wind whipped that water, crashed those waves over the top of those dikes, I would judge it took them down 2 or 3 feet.

And that's the maintenance problem we would have with dikes in an area that doesn't need dikes at all.

Now, I don't say that about Flint. I don't know Owosso. Small. Look at the price of it. It's so small that any one of those communities where there are progressive citizens could have taken care of their problem 50 years ago if they wanted to.

In that sense, drainage is a funny thing. I had one township up there, Cotchville Township, in Saginaw, one of the richest, flattest, finest agricultural townships in the area. A lawyer got an injunction some 35 years before restraining the construction of a drain, and it was the only drain that drained that whole township. I spent 3 years adjusting the differences of farmers. We finally got rid of the injunction. We built the drain, paid for it in 1 year—and a terrific assessment. The farmers had to borrow the money. But, as I stand before you today, they have come and thanked me because they made back that money in the first year.

The difficulty with the dike problem, in distinction to the drainage problem, is that you have an annual maintenance cost. The Federal bill goes on and on and on—and assessed by a remote power against everybody. And that maintenance cost over a period of time will exceed the flood costs.

We have had only two genuine floods, 1904 and 1916, and I challenge them to point to any others. The inflated figures of 1946 and 1948 were ordinary inundations.

If a man builds his home in a hole that's full of water or will be full and the sheriff has to go out three times a year, every time there's a hard rain, and get a boat and haul him out, is that a state of emergency? No. And that's exactly our situation here.

And I say to you gentlemen that to me—and maybe I'm too hidebound in these things—but it's a case of spending Federal funds where they are not needed. Lord knows, you can use it for a million other good projects that are badly needed. This project requires a study, a determination of the nature of this river channel. How deep is it? What can be done with it by the Federal Government? A study in the matter of soil conservation, water conservation, all of those things.

And I think Congressman Bentley has a very fine editorial of the Saginaw News, which is a Booth newspaper in Saginaw, a very fine newspaper. A very learned man in an editorial flatfootedly came out against this flood-control project, wrote a half-page editorial which I think is something to read. And they told the city council and the citizens they'd better go down to Ohio and see what Louis Bromfield did there and apply some of it to the Saginaw watershed, which could be——

Mr. ROGERS. May I ask a question? Whom do you represent, sir?

Mr. NEBERLE. I stated that I represent the Saginaw County Farm Bureau, the Shiawassee Flats Agricultural Association, the Swan Creek–James Farm Bureau.

Mr. ROGERS. How many people are involved, would you say, sir?

Mr. NEBERLE. I would say roughly—I'd have to ask the question. Herb, how many in the Saginaw County Farm Bureau roughly?

Mr. HERBERT J. DIETRICH. I don't know what their membership is. Swan Creek–James is about 75.

Mr. NEBERLE. Seventy-five; and in the other association, as I recall, there's something over 200——

Mr. DIETRICH. Saginaw County Farm Bureau runs up to 2,000, I think.

Mr. NEBERLE. I think the Shiawassee Flats organization, which are contiguous landowners in part—Mr. Shem, who I speak of, who has a tremendous farm on the river which is now flooded, is a member of that.

Mr. ROGERS. Does your city council or the county organizations oppose this? Do you have any resolutions from them opposing this?

Mr. NEBERLE. No; there has been no effort to secure resolutions. These pertinent facts——

Mr. ROGERS. I think they did present some in favor of it, and I wondered if you had any against it.

Mr. NEBERLE. Well, I would call—no, I have no objection, except to this extent: I would call your attention to the date when those things were taken with reference to the Board of Supervisors of Saginaw

County. I'm familiar with that board. There are as many city members as rural. There was an informal poll taken. That's not action of the board. No official resolution. Just talked to the right people.

Mr. ROGERS. I don't want to get into a discussion. I just wondered if you had one or not.

Mr. NEBERLE. I wanted to call your attention——

Mr. ROGERS. Another thing, please. Could you tell me if you are an engineer?

Mr. NEBERLE. Am I an engineer?

Mr. ROGERS. Yes, sir.

Mr. NEBERLE. I am not, sir. I am an attorney.

Mr. ROGERS. I see. Well, then, you feel that this can be solved, as I gathered from the testimony, by the Engineers deepening the river there from 10 feet to 24. Now, do you know whether the Engineers considered that suggestion?

Mr. NEBERLE. I know that many suggestions were made. One——

Mr. ROGERS. Was that presented to them?

Mr. NEBERLE. That was presented to them.

Mr. ROGERS. That's all I wanted to know—if that suggestion was presented. I just wanted to get these for my own information, if you'll just answer these questions for me.

Now, they have considered that possibility that's been presented to them. Admit that there is water, although you say, I believe, that it's an inundation rather than a flood. I just wonder if there's much difference to people who have to endure that. The water is there, no matter whether you call it inundation or flood. What is your thinking on that?

Mr. NEBERLE. Well, I make this distinction: The land is covered with water, but in this instance it rises very slowly as the rains come down. The water is gathered——

Mr. ROGERS. So maybe they can get out faster that way? Is that it?

Mr. NEBERLE. A flood—the ones we had—result from ice jams, tremendous break-up and a tremendous sheet of water. The thing I refer to—breaking of dikes, reservoirs—would cause to me a flood. It wouldn't be an inundation. The inundation would follow.

Mr. ROGERS. Well, you feel there's a water problem and that something should be done, but you don't agree with the engineers' plan? Is that correct?

Mr. NEBERLE. Well, I agree with the engineers, some of the statements they have made, sir. If I may read them, I have them in my statement.

Mr. ROGERS. There's no point in going into that. You do object to part of their plan and you approve part. Is that correct?

Mr. NEBERLE. No, I would say we object to the present project as a whole and the entire engineering plan.

Mr. ROGERS. You object to it all?

Mr. NEBERLE. Yes, sir.

Mr. ROGERS. Now, may I ask if any of your clients own land that might be taken in the Shiawassee Flats project?

Mr. NEBERLE. I may say there would be none taken. It's going to be purchased if they are willing to sell.

Mr. ROGERS. Well, they have land that would be included in this plan? Is that correct? So that their lands might be purchased if this plan goes through?

Mr. NEBERLE. There are a few, yes.

Mr. ROGERS. Do you represent some of those?

Mr. NEBERLE. No, I do not. I represent these organizations.

Mr. ROGERS. Well, you don't represent the drainage commissioner personally?

Mr. NEBERLE. He also was authorized by these same organizations to appear here before the committee.

Mr. ROGERS. Then you're not representing him as a person either? Is that right?

Mr. NEBERLE. I would say that's correct.

Mr. ROGERS. Thank you.

Mr. NEBERLE. Except that he is a member of the organizations.

Mr. BECKER. Mr. Chairman, I don't quite understand of my colleague as to whom the gentleman is representing, whether it's someone who is going to sell property or whether he is representing people whose property is going to be affected by this.

I want to compliment the gentleman on a very forceful case presented here. I think it's the first time in my history I ever heard an opposition to a project put so well and so honestly and so clearly.

As far as I'm concerned, it's rather refreshing to me to hear a man get up here and acknowledge there are great forces against him when he comes in, and he says that this can be done on a local basis—as you did state——

Mr. NEBERLE. Yes, sir.

Mr. BECKER. And that it isn't necessary for the Federal Government to come in and spend $20 million to do that job. Is that correct?

Mr. NEBERLE. That's correct.

Mr. BECKER. I say you have done a very good job. You impressed me. I don't say I can go along with it, because I do not know all the facts as yet. However, I think you have done a marvelous job in pointing out things that I can understand. I can clearly see why floods can be created if the Saginaw River down in that area is reduced to 10 feet where it ought to be 20 feet if it's going to carry off the water.

I can certainly see, as you pointed out, there would be a serious plug there that would cause floods.

I also say I understand clearly the difference between flood caused by those conditions and inundation caused by rains that only God himself can prevent. I don't think dikes or anything else would prevent it. When you have serious flash rains of that type you're going to have floods no matter where you are.

I want to compliment the gentlemen very highly for the manner in which he presented his case and the clearcut way in which he presented it. I wouldn't care whether you represented people owning property or ont or were handling their sales or not. That would have no effect on me whatever. But you have presented the interest of those organizations. You have done a very good job. I——

Mr. NEBERLE. I too am a taxpayer, sir, and I have some interests.

Mr. BECKER. You are a citizen, and you have a perfect right to do it.

Mr. NEBERLE. In case the members of the committee do not have an opportunity to read the report, I would like to state for the record that in—well, I would point first to the present engineer's report, who said that flood control by itself is not feasible or justifiable. I think

language to that effect is in this 1954 report; coupled with wildlife it makes sense from a Federal standpoint because there's a national interest. I mean the engineer's own report is to that effect.

Now, this project has been up here for money on this project a number of times. At least it got as far as the engineers. In 1942 Major General Reybold, Chief of Engineers in the Detroit district, stated this:

"After due consideration of these reports"—that is, the subreports that he received—the district engineers and so on—"I concur in the views of the Board"—that is, the Board of Engineers for Rivers and Harbors—"that flood control measures on the Saginaw River are not economically justified. I therefore recommend that no improvement for flood protection be undertaken by the United States at this time." 1942.

Going back to 1937, the United States War Department made a preliminary examination of this same project, considering the flood disaster menace—as they called it then—rather than the related but separate problems of soil erosion and land improvement, and came up with a report from the Great Lakes division engineers that:

> The probable cost of any feasible plan for flood control in the Saginaw River Valley for exceeds the benefits which can be determined at this time.

I want to call your attention to something that has happened up there by way of change. Many years ago we had a flood problem, two southern rivers, one northern river. They kind of checked each other. The southern rivers let go first. They came in one at a time. Even when two of them came in it wasn't too bad, but when that third one from the north came in at the same time, that's when you caught floods. Still inundations, but more so than usual.

Floods were caused by ice jams, et cetera, that held it back.

Since that time, the Tittabawassee River, the northern offender, a tremendous, sprawling Dow Chemical works put so much heat and chemical into that river at Midland, Mich., that it does not freeze in the wintertime from that point to Saginaw. It has eliminated the ice problem. With the Saginaw River, with the tremendous General Motors works, the big Consumers Power generating plant, the same thing has happened; no ice in the winter. Those rivers are open all winter to receive the water.

Years ago there used to be 2 feet of ice on the river. They used to run trotting races in the middle of it and had large crowds on it and took out tremendous blocks of ice. Those things are gone. The river today is in better shape than it was when some of these reports were made.

So I say it probably wouldn't have to be deepened to 24 feet, as it was recommended by a prominent engineer in 1916, because it no longer freezes up to the extent it once did. And that is progress that has been made industrially in this project that didn't cost anybody a cent. They made a pretty good job of it. It's a terrific thing, but those rivers don't freeze. And I think that again is one of the things that must be taken into consideration.

The watershed is improved.

I think it's a local project—the cleaning out of the river. And I have made these recommendations in my written remarks here that they resurvey this project, look at it from a combined flood-control,

soil-erosion, water-conservation, future-navigation standpoint—St. Lawrence Waterway. Even take a look at those low-level bridges that will be in the middle of that channel. Those are the things. They are not only of local interest; in times of a war effort they would be of a national interest. And for that reason I think the thing should be gone over.

Mr. DEMPSEY. Mr. Mack wants to ask you a question.

Mr. MACK. We have here, as I see it, about nine different projects in the Saginaw River Basin.

Mr. NEBERLE. Yes, sir.

Mr. MACK. With an aggregate cost in excess of $20 million. The principal and key project of the group is the Shiawassee, involving the expenditure of more than $12 million, or 60 percent of the total. Previous witnesses testified that in order to get the water away from these other areas it would be necessary to provide some flood-control features in the Shiawassee area. The engineers have presented one proposal, and you have suggested deepening of the channel of the Saginaw River as a means of hastening the flow of the water into the lake. You mentioned somebody as having proposed that project, and I didn't catch the name. Who was he?

Mr. NEBERLE. Mr. Cooley. That is the project I have suggested of cleaning out the river?

Mr. MACK. Yes.

Mr. NEBERLE. That was proposed in 1916 by Lyman Edgar Cooley, who was an eminent engineer of that time, not the dean of the University of Michigan Engineering School.

Mr. MACK. Were there any estimates made of the cost or the nature of the work?

Mr. NEBERLE. There were not, sir.

Mr. MACK. Was this proposal submitted to the engineers at the time the hearings were held in Michigan on this flood-control project?

Mr. NEBERLE. They were. This brochure put out by the Saginaw Valley watershed management plan said in here—and again about the first paragraph it said this is all based on notes, so I didn't pay much attention to it, but they have an estimate in here of $450,000, which I don't think is accurate.

Mr. MACK. Your proposal was that the channel should be deepened from 16 feet to 24 feet?

Mr. NEBERLE. From the confluence of the rivers, which is some distance beyond the end of the present boat channel.

Mr. MACK. Over how long a distance would that deepening occur?

Mr. NEBERLE. 3 to 4 miles, in my judgement.

Mr. MACK. There have been no estimates of cost on such a project?

Mr. NEBERLE. No, there have not, as engineering efforts.

Mr. MACK. It would have certain benefits from a navigational standpoint as well as flood control, I presume?

Mr. NEBERLE. It would have definite navigational benefits. However, as I say, the Saginaw City Council proposes to put two low-level bridges in the middle of that, so I don't know.

Mr. MACK. What is the area of this Shiawassee Flats?

Mr. NEBERLE. The total area of the flats is—Herb, do you have that?

Mr. MACK. What I'm trying to arrive at is this: It was testified by you that 20,000 acres will eventually be placed in a wildlife refuge.

Mr. NEBERLE. Yes, sir.

Mr. MACK. What percentage of Shiawassee Flats is that?

Mr. NEBERLE. From a storage standpoint it's not a large percentage.

Mr. MACK. Twenty thousand acres is a considerable area?

Mr. NEBERLE. It's a considerable area. But the flood reservoir is a great area.

Mr. MACK. And who will be the owners of this wildlife refuge? You say at the present time 3,000 acres are in Federal control and 4,000 in State ownership and that they plan to use 13,000 acres more. Who will control that?

Mr. NEBERLE. I understand that the Michigan Department of Conservation, with authority from the Fish and Wildlife Service, will administer this. Now the reason they intend to establish that wildlife refuge there—their part of this project you will notice is a contribution in terms of money, but actually an agreement between them that they are going to contribute the land. They are each to give half the land that is required for the reservoirs of the flood-control project. In return, I might add, they get a diked area. They are going to buy something like a half a mile around that also so that you can't get into it without trespassing on other lands, to control it, of course, which is perfectly proper.

Mr. MACK. I think the testimony of the engineers was to the effect that 70 percent of the cost would be for flood-control features and 30 percent for wildlife, which would mean approximately $4 million would be represented by the wildlife phases of the project.

Mr. NEBERLE. That might be true, sir. I have the figures but I haven't quite been able to match them together.

Mr. MACK. That's all the questions I have.

Mr. DEMPSEY. Did you say you have another witness?

Mr. NEBERLE. No, sir; I'm the lone witness. Mr. Dietrich is here, with the thought you'd like to hear two witnesses, but I understand you prefer one, and I'm enough, so I——

Mr. DEMPSEY. Thank you very much.

Mr. NEBERLE. Thank you for your very attentive audience, gentlemen.

Mr. DEMPSEY. General Itschner, I would like to ask you a question. You were here and heard Mr. Neberle testify.

Maj. Gen. E. M. ITSCHNER. Yes, sir.

Mr. DEMPSEY. I'm sure the committee would like to have your comments upon his testimony. Would it be convenient?

General ITSCHNER. Yes, sir. I would like to mention 1 or 2 facts in connection——

Mr. DEMPSEY. Do you want to do it orally, or do you want to give us a statement? Whichever you want.

General ITSCHNER. I think perhaps it would be better, sir, for me to just mention very briefly 1 or 2 points and then follow it with a written statement.

But the witness was quite correct in the statement that the project is not justified as a flood-control-only project. Our report so states it is justified only as a dual-purpose wildlife-improvement project and a flood-control project.

Second, the witness made quite a point of the fact that the river at its lower end could be dredged and that would be a preferable solution. He is correct in his statement that the river could be dredged and it would solve this problem, and it was considered as a possible solution by the district engineer. However, he discarded that solution because of the cost. He estimated that 21 million yards or more of excavation would have to be accomplished and that the total price of that project would be something in excess of $20 million as compared to the $12 million cost of the project that he proposed, and, obviously, the benefits would not be as great, because that project would benefit only flood control, whereas the project proposed by the district engineer would benefit both flood control and wildlife.

Mr. BECKER. He said that insofar as the wildlife was concerned you would not be adding 1 acre to the wildlife preserve there. Is that true?

General ITSCHNER. I would like to ask Mr. Weinkauff to testify to that.

Mr. BECKER. That was my understanding of his statement.

Mr. WEINKAUFF. Perhaps if I run down and give you briefly a few figures in connection with this particular project in Shiawassee Flats it might answer your question.

There is a total of 48,000 acres in the entire Shiawassee Flats area, of which about 28,000 are farm or pasture and the remaining 20,000 are timber and brush and swamp.

Now, during severe floods, the entire 48,000 acres are flooded. At least 9,000 acres are flooded every year, on an average annual basis.

Mr. DEMPSEY. For what length of time?

Mr. WEINKAUFF. Well, it depends, of course. Several days in most cases by the time the floodwaters are off the land. And in some cases several weeks' duration.

Mr. BECKER. Didn't he say there is a reservoir there now consisting of 8,000 acres?

Mr. WEINKAUFF. He mentioned the 8,000 acres, sir, which has already been purchased for fish and wildlife. That has already been acquired. However, there is approximately 16,000 acres to be purchased in fee for fish and wildlife purposes.

Mr. MACK. In addition to the 7,000?

Mr. WEINKAUFF. No, sir. This is a total of 16,000 for fish and wildlife purposes.

The area within our lateral reservoirs is about 16,000 acres. Now, of that 16,000 acres, about 9,300 acres have never been cultivated, leaving roughly 7,000 acres which have been cultivated—that is, in these areas in which we propose to utilize reservoir storage.

Now, as another point, the sequence of flooding, these units are not flooded in every flood. We start taking off only on peaks and units 1 and 2 will start storing.

Mr. SCHWENGEL. We just asked the simple question: Did this man tell the truth or not? That's the question. We're going clear around this whole testimony again.

Mr. DEMPSEY. We want some information here.

Mr. BECKER. Yes, but the question I did ask you was whether this man was telling the truth.

Mr. DEMPSEY. If you listened to General Itschner, he said he did tell the truth. He concurred with him.

Mr. SCHWENGEL. I'm talking about this question you have been trying to answer here. Is it possible to answer that question yes or no?

Mr. WEINKAUFF. I would prefer not to say whether or not he told the truth, sir. I was hoping I could get it across to you by some——

Mr. BECKER. He said this very clearly in his testimony—that if this flood control was put in, talking about the wildlife preserve, that it would not add 1 acre to the amount of wildlife preserve that is usable there now. Is that correct or not?

Mr. WEINKAUFF. That statement is correct that the flood control and—on the other hand, we would not take any more acreage for this flood control than would be utilized for wildlife.

Mr. BECKER. So his statement was correct?

Mr. WEINKAUFF. General Itschner asked a question about where did we get our wildlife benefits. The benefits are obtainable, of course, from the control of those 2 areas due to gates and controlled flooding.

Mr. DEMPSEY. Gentlemen, we are going to have to cut this short because we have some-out-of-town witnesses here who are scheduled to go on, and I wonder if you would for the committee's benefit, give us a statement in addition to what you have said covering the various points that Mr. Becker has brought up, and as much as you can, so that we have all the facts necessary to make the decision in this matter?

General ITSCHNER. Yes, sir, we would be very glad to do that.

Mr. SCHWENGEL. I would like to have the General include in that also a detailed review—or as much as you can without too much expansion—on the cost of this 4-mile stretch of dredging.

General ITSCHNER. We have that information; yes, sir. That project would be $20 million or more. But I understand your question about the amount of land, and we will give you a statement on that, sir.

(The statement requested is as follows:)

1. *Alternative solutions considered.*—The enlargement of Saginaw River proper to solve the Shiawassee Flats flood-control problem was given consideration during the course of the investigation. Various degrees of such enlargement were considered but none was economically justified. One plan considered enlargement of Saginaw River to an extent sufficient to increase the discharge capacity by 60 percent and included some diking across Shiawassee Flats to limit overflow during large flows. The excavation alone under this plan would amount to 21,700,000 cubic yards and the cost of the plan is estimated in excess of $20 million. This compares with an estimated cost of $12,568,500 for the recommended plan for Shiawassee Flats. In addition, the benefits that would accrue from the enlargement plan would be considerably less than for the recommended dual-purpose plan since the fish and wildlife annual benefits of $183,200 would not obtain under the enlargement plan. A plan for enlargement alone without any diking was also considered but would require a cross-section three times the size of the present Saginaw River and would clearly lack economic justification.

2. *Economic justification.*—A project for flood control alone would not be economically justified. A dual-purpose project for flood control and fish and wildlife purposes is, however, justified, with a benefit-cost ratio of 1.11.

3. *Source of fish and wildlife benefits.*—Fish and wildlife benefits would accrue from the recommended plan because of the controlled operation possible under this plan. Conservation pools would be provided for fish and wildlife. The more frequent smaller floods would bypass the lateral reservoirs, with only the excess of the larger floods being stored in the lateral reservoirs. The conditions thus created in the lateral reservoirs would be favorable for growth of natural wildlife food sources and for the permanent and temporary habitat of fish and wildlife.

4. *Storage with and without the project.*—The question was raised as to whether the recommended plan creates any additional storage over what is now available. No additional storage is created by the recommended plan. However, the storage is controlled, and by means of this control both flood control and fish and wildlife benefits are produced. It should also be noted that should the local levees be raised or extended without the benefit of a complete plan, such as proposed, they would encroach on the natural storage and worsen the flood situation both in Shiawassee Flats and downstream at Saginaw. The land required for fish and wildlife project alone is approximately the same as the land required for a dual-purpose flood control and fish and wildlife project.

Mr. DEMPSEY. Without objection, the Chair will ask permission to insert in the record at this point a letter and statement from Milton P. Adams, executive secretary, Water Resources Commission, State of Michigan. He is in favor of the project. Also a statement from Senator McNamara, a letter from Gerald E. Eddy, and a telegram from G. Mennen Williams—all in favor.

(The documents referred to follow:)

STATE OF MICHIGAN,
WATER RESOURCES COMMISSION,
Lansing, Mich., May 11, 1956.

Subject: Flood control, Kalamazoo River at Kalamazoo.

RIVERS AND HARBORS SUBCOMMITTEE,
House Public Works Committee,
New House Office Building, Washington, D. C.

GENTLEMEN: This project has been developed with the local approval by the Corps of Engineers for prevention of a second serious problem of flooding on the Kalamazoo River. The first was at Battle Creek, which has been authorized and construction is already underway.

We understand that the project, aside from the development of final plans which may require slight modification, is satisfactory to the city, surrounding townships and paper mill interests.

I believe it is in conformity with the only way the several necessary objectives relating to the uses of this water can be made.

The project has been reviewed and approved by this commission.

Favorable consideration of this project is strongly recommended to your committee. It is hoped that it may be authorized for construction before Congress adjourns.

This recommendation is made under authority of section 2A of the statute creating this commission, copy of which is attached.

Very truly yours,

MILTON P. ADAMS, *Executive Secretary.*

STATEMENT TO THE HOUSE COMMITTEE ON PUBLIC WORKS BY SENATOR PAT MCNAMARA, OF MICHIGAN

Mr. CHAIRMAN: I wish to inform the House Committee on Public Works of my support for the Flood Control Survey for the Saginaw River, Mich. (H. Doc. No. 346), which is currently under consideration by the committee. The long past history of floods in this river basin emphasize the importance of this flood-control project. Again this year, the Sanilac Flats area of the Saginaw River Valley has been flooded, bringing destruction, misery, and property losses to the residents of the area. The Saginaw River Valley is one of the most important industrial areas of the State of Michigan. Safeguarding the people of this valley from the dangers and losses brought on by recurring floods is, to my mind, a subject of immediate and vital importance.

I hope that the House Committee on Public Works will give favorable consideration to the Saginaw River, Mich., Flood Control Survey.

PAT MCNAMARA,
United States Senator.

MICHIGAN DEPARTMENT OF CONSERVATION,
Lansing, May 14, 1956.

CHAIRMAN, FLOOD CONTROL SUBCOMMITTEE,
House Committee on Public Works,
New House Office Building, Washington, D. C.
(Attention Charles G. Tierney, Chief Clerk and Counsel.)

DEAR SIR: The conservation department wishes to go on record as favoring the Saginaw Valley flood control project. Our special interest here, of course, is in the Shiawassee Flats wildlife and wild fowl area.

The installation of the structures as set forth in the plans will add materially to the value of this area for hunting and other recreational use since the features planned will provide both storage of water and the creation of better habitat and at the same time will be used to alleviate flood conditions downstream.

Very truly yours,

GERALD E. EDDY, *Director.*

LANSING, MICH., *May 10, 1956.*

Hon. CLIFFORD DAVIS,
United States House of Representatives, Washington, D. C.:

As governor of the disaster ridden State of Michigan, I wish to add my voice in urging favorable action by your subcommittee and by the House and Senate on the Saginaw Valley and Kalamazoo River flood control projects. Never has the need for prompt and effective stream regulation in these areas been made more clear than in the current flood situation resulting from recent torrential rains and tornadoes. Lives and property will remain seriously endangered until these vital projects are completed.

G. MENNEN WILLIAMS,
Governor of Michigan.

WHITE OAK CREEK AND CYPRESS CREEK (H. RES. 386)

Mr. DEMPSEY. We will hear next from Mr. Patman.

STATEMENT OF HON. WRIGHT PATMAN, A MEMBER IN CONGRESS FROM THE STATE OF TEXAS

Mr. PATMAN. I am here in behalf of the House Resolution 386, concerning a survey on two projects considered small in the district I have the honor to represent, White Oak Creek and Cypress Creek.

I would like permission, Mr. Chairman, to insert in the record a statement prepared in support of these two projects—letters addressed to the chairman of this committee.

Mr. DEMPSEY. Without objection.

(The letters referred to follow:)

STATEMENTS CONCERNING WHITE OAK CREEK

Letter by—
Mr. Roger Davis, Mount Vernon, Tex.
Mr. J. M. Moore, cashier, First National Bank, Mount Vernon, Tex.
Mr. Joe Harden, Mount Vernon, Tex.
Hon. Joe N. Chapman, state representative, Sulphur Springs Tex.
Mr. M. L. Edwards, Mount Vernon, Tex.
Mr. James T. Bass, publisher, Mount Vernon Optic-Herald, Mount Vernon, Tex.
Mr. Hughie D. Bogue, Mount Vernon, Tex.
Hon. Sam B. Harvey, mayor, Mount Vernon, Tex.
Mr. Louie Bond, water superintendent, Talco, Tex.
Hon. Jerry Jones, mayor, Talco, Tex.
Mr. Lon Jones, cashier, Talco State Bank, Talco, Tex.
Mr. Otis H. Slaughter, Jr., Mount Vernon, Tex.
Mr. O. M. Mitchell, Mount Vernon, Tex.

Mr. S. S. Norris, Mount Vernon, Tex.
Mr. F. J. Joyce, Jr., superintendent, public utilities, Mount Vernon, Tex.
Mr. William W. Grisham, Jr., Titus County agricultural agent, Mount Pleasant, Tex.
Mr. C. R. Brown, Franklin County agricultural agent, Mount Vernon, Tex.
Mr. Frank Hicks, Mount Vernon, Tex.
Mr. Harold Hatchett, Newsom Packing Co., Mount Vernon, Tex.
Mr. Charles L. Lowry, president, Franklin County Chamber of Commerce, Mount Vernon, Tex.
Mr. Nolan Mix, manager, Wells Lamont Corp., Mount Vernon, Tex.
Mr. Bill D. Allen
Mr. Fred Hogan, president, Mount Vernon Rotary Club, Mount Vernon, Tex.
Mr. L. D. Lowry, Jr., Mount Vernon, Tex.
Hon. J. R. Pruitt, county judge, Franklin County, Mount Vernon, Tex.
Mr. R. T. Wilkinson, attorney at law, Mount Vernon, Tex.
Mr. Lee H. Howison, Mount Vernon, Tex.

MOUNT VERNON, TEX., *May 7, 1956.*

Hon. CLIFFORD DAVIS,
Chairman Subcommittee, Public Works,
Washington, D. C.

DEAR MR. DAVIS: The proper balance of land and water has always been a big factor in the progress and stability of man.

Texas is yet blessed with extended wide-open acres of good soils. As Texas population increases, water for agriculture, commerce, industry and domestic uses becomes a limiting factor to expansion. We have the rainfall here in northeast Texas but it rushes away with our soils, floods the plains and fills the harbors of our coastal cities. Dams to store the runoff is a great factor in preparation for expansion and stabilization of town and country life.

A dam across White Oak Creek is a much-needed project at this time. It would be very helpful in keeping families here who otherwise will have to leave here and help congest the larger cities and finally be a liability to the Government as payrolls dry up in the industrial centers. Impounded water is not only needed for the above purposes but for recreation and climatic reasons. I am a small family-type farmer with some farmland 15 miles from any possible dam site, but impounded water on White would be a stimulant to my farming business.

Sincerely yours,

ROGER DAVIS.

MOUNT VERNON, TEX.,
May 5, 1956.

Hon. CLIFF DAVIS,
Chairman, Subcommittee on Public Works,
House of Representatives, Washington, D. C.

DEAR MR. DAVIS: The purpose of this letter is to advise you of the condition that confronts us here in Franklin County regarding the White Oak Creek, which is about 5 miles north of the county seat.

More than 20 years ago, before I was made postmaster at this place, I was in the automobile business. I recall an epidemic of flu over the country, and people north of White Oak Creek were without medical attention a part of the time due to the fact doctors could not cross the creek on account of high water. I recall the late Dr. Fuquay telling me of his driving to Mount Pleasant, north to Talco, and west, to get to some very ill patients, and he took the entire day in trying to serve them.

It is true we have a highway across the creek at this time, but I have seen it closed a few times due to high water.

Back in the twenties we had a very prosperous farming county. All along on the hills, along this creek, there were a number of farmers and homes. Along a section of some 10 miles, this office served better than 20 farm homes on 1 route. Over that same section now there is only one home. All the others have moved out, and the land has been turned to grass or grazing land. When we have high waters the pastures are damaged, and the cattle have to be moved to hill pastures for weeks at a time, or until the water recedes. Then it is necessary to keep

them out until after a shower comes to wash off the grasses before the cattle can graze it.

Records show this county has lost some 4,000 people the past 20 years. A great part of them have been forced to leave the farms to seek better living conditions. It has been necessary for the post office to discontinue service to most all the section I have discussed, which bordered White Oak Creek across the entire county, and which in the past was some of our most fertile lands.

We have thousands of acres of fertile land in this creek bottom, and are deprived of its production due to the lack of controlling the water. If it were possible to have it controlled, the same country would be resettled, new homes erected, and prosperous farming would begin again.

I can account for about 50 families who have moved from this section over the period we have mentioned.

Respectfully,

W. L. NELSON, *Postmaster.*

THE FIRST NATIONAL BANK,
Mount Vernon, Tex., May 5, 1956.

Hon. CLIFF DAVIS,
Chairman, Subcommittee on Public Works,
Washington, D. C.

DEAR SIR: I am interested in the proposed dam on White Oak River that rises in Hunt County, Tex., and crosses Hopkins, Franklin, and Titus Counties, and empties into Sulphur River. I have lived here all my life and am 72 years of age and I know the characteristics of said stream. It is very destructive during overflows. Destructive to crops, pastures, and to cattle in the lowlands. We have an annual rainfall on the average of 45 inches and during said rainy seasons much topsoil is washed into the river.

Some of the benefits would be storing of adequate water for towns and local communities for a long time to come; reclaiming for farms and pastures of use of some of the most fertile land in east Texas; prevent soil wastage and help to conserve the soil and water resources of this community; that is, a great part of northeast Texas.

Yours very truly,

J. M. MOORE.

THE FIRST NATIONAL BANK,
Mt. Vernon, Tex., May 5, 1956.

Hon. CLIFF DAVIS,
Chairman, Subcommittee on Public Works,
Washington, D. C.

DEAR SIR: I am a landowner in and adjoining White Oak River Bottom in Franklin County, Tex., in the locality of a proposed dam on said river. I am sure that it would be a great help in this country.

It would protect lots of good land from overflow that cannot at this time be handled successfully because of said overflow. It would prevent crop destruction by overflow. It would store water that is badly needed by towns and small community centers in this locality. It would reclaim much very rich soil and prevent soil erosion to a great section.

Yours very truly,

JOE HARDEN, *Landowner.*

THE STATE OF TEXAS,
HOUSE OF REPRESENTATIVES,
Austin, Texas, May 5, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Public Works Subcommittee,
House of Representatives, Washington, D. C.

DEAR MR. CHAIRMAN: I own 1,200 acres of land bounded on the north by White Oak Creek in Hopkins County, Tex., White Oak Creek being the north boundary of my land for approximately 1½ miles. This farm is made of some of the best virgin soil in the United States. I have attempted to work my land in crops for many years but find that due to the fact that White Oak Bottom is flat, it overflows too often to be economically safe for farming. During the past several years I have lost several head of cattle due to their being caught in overflows and the fact that at times when White Oak Creek overflows the water is from a mile and to a mile and half in width. It is hard to get cattle out of the

overflow and thousands of dollars in losses on my little farm alone have been caused during the past 10 years due to floods.

A dam on White Oak Creek north of Mount Vernon in Franklin County and the channeling of White Oak Creek above the dam would practically eliminate flood conditions and reclaim some of the best land in the United States for agricultural and grazing purposes.

Your cooperation in doing whatever you can to promote a flood-control project on White Oak Creek will be a service to your country and sincerely appreciated by the people in northeast Texas.

Respectfully yours,

JOE N. CHAPMAN.

MOUNT VERNON, TEX.,
May 5, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee of the Public Works Committee,
Washington, D. C.

DEAR SIR: This letter is written to you in regard to the White Oak Creek project of Franklin County, Tex. Wish to advise you that I have owned a 1,200-acre farm in the northeast part of Franklin County for about 50 years and White Oak Creek runs through it and makes useless many acres of my farm that can't be used for anything. I have about 400 more acres of land there that overflows and therefore can only get limited grazing use of it. Naturally we cannot farm any of the farm bottom land.

Our only solution to the flood control of White Oak Creek is to first make the survey of the project and see if it would pay off to those concerned. Most all the soil along White Oak Creek is very good and would make valuable farms and grazing land if we could ever get anything done with all the overflow water.

Please give the making of the survey for the project your solicited consideration for we farmers of Franklin County, Tex., as we are in dire need of some control of White Oak Creek.

Very truly yours,

M. L. EDWARDS.

MOUNT VERNON OPTIC-HERALD,
Mount Vernon, Tex., May 5, 1956.

Hon. CLIFTON DAVIS,
Chairman of Subcommittee, of Public Works Committee,
House of Representatives, Washington, D. C.

DEAR MR. DAVIS: I received word late Thursday that you have granted the Honorable Wright Patman, Representative from this district, a hearing in executive session on the proposed reservoir and flood-control project that we are seeking on White Oak Creek north of Mount Vernon. I appreciate very much the consideration that you are giving us.

As editor of Mount Vernon's newspaper, I am in constant contact with the problems of our town and area and especially our farmers as I visit and work with them in efforts to improve our farm economy.

I find that the farmers in White Oak bottom are forced to take their cattle out of the bottom during the spring and early summer due to the danger of flooding, and many times are forced to go in the bottom and drive their cattle out at other times during the year. Almost all row-crop farming has been abandoned in the bottom lands.

Even though the area generally has sufficient rainfall over a year to grow crops, it has come to the point where if these rains don't fall at the proper time our farm production is cut into deeply.

It is also becoming a greater problem each year to have enough water for consumption in Mount Vernon. At one time in recent years it was necessary to haul water for domestic consumption from a neighboring town which is now suffering from a water shortage.

Since that time the city of Mount Vernon has built a small lake which supplemented our wells and was adequate at the time. The lake has not caught enough water in the past 3 years to put it over the spillway at any time. At one time last year it rose to within 18 inches of the spillway but at the present time lacks 4½ feet of being to spillway level. This is in view of 3½ inches of rain that has fallen within the past week.

I feel that if a reservoir and flood-control project were built on White Oak that it would alleviate much of the drought problem facing our farmers, for water would be available for irrigation. It would also relieve our water shortage here in Mount Vernon as it would make an abundant supply of water available about 4 miles from our city. It would also relieve the flooding conditions that harass our farmers.

The situation that exists has made it almost impossible for the small farmer to stay in business and our population in the county has dropped from about 10,000 in 1940 to 6,000 at the present time.

We have attempted to get numerous industries in the past few years to locate in Mount Vernon, and in several instances have failed due to the short water supply. One industry, the Byer-Rolnick hat factory had practically settled on Mount Vernon until it was found that they would require approximately a half million gallons of water per day. Of course this was far more than we could think of supplying.

Many farmers have turned to irrigation in the past few years but cost of these systems has been tremendous due to the fact that they have to provide their own water supply by building small lakes and in some areas by drilling wells.

The area that will be flooded by such a reservoir is given over largely to cattle grazing about 6 months out of the year while it is not usable the rest of the time. By far a much larger portion of the area that will be flooded is not usable at all and is considered as wasteland.

I feel that if the Army engineers were to make a new survey of the area, they will find the situation has changed considerably since the last survey was made. Value of the land that will be covered has dropped considerably and a reservoir which would make irrigation possible will increase the value of the land for miles around.

We have investigated the possibility of pipelines from Cooper Dam and Reservoir, Ferrell's Bridge Reservoir and the proposed reservoir on Cypress, south of Mount Pleasant, and have found that cost of pipelines and pumping facilities would make the delivery price of water exorbitant in Mount Vernon.

Your committee's approval of a survey of White Oak creek will, I am sure, be justified and we feel that the economic justification for such a project is evident.

Every consideration given this proposed project will be greatly appreciated.

Sincerely,

JAMES T. BASS,
Publisher.

THE FIRST NATIONAL BANK OF MOUNT VERNON, TEX.,
Mount Vernon, Tex., May 5, 1956.

Hon. CLIFF DAVIS,
Chairman, Subcommittee on Public Works,
Washington, D. C.:

I own land on White Oak River, in Franklin County, Tex. I have known this stream for a long time and I am acquainted with the destruction that it causes during overflowing periods, in the loss to crops, land, and drowning of cattle.

The rainfall in this county will average 45 inches annually which causes a great many overflows and destruction. The proposed dam would conserve water and make land, some of the richest, below the dam subject to be farmed and reclaimed from waste. It would help towns and villages in this locality have the supply of water needed in this section for a long time to come.

I am sure that it would be a great asset to the Government at large.

Yours very truly,

HUGHIE D. BOGUE,
Landowner.

CITY OF MOUNT VERNON,
Mount Vernon, Tex., May 4, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee of the Public Works Committee,
Washington, D. C.

DEAR SIR: Concerning the White Oak Creek project in Franklin County, Tex., I wish to take this means of pointing out to you several important factors for your consideration in the coming meeting next week.

The city of Mount Vernon, Tex., has at the present time just ample water for normal residential and commercial use provided there is not additional expansion. In 1950 the city hauled its water from nearby towns and in 1951 a small lake and plant was added at a cost of $150,000 to give us this present supply which is barely ample.

We have endeavored to join a Cypress Water district and also the Ferrell's Bridge district but this was not feasible because of the great distance involved for pipelines. Brown & Roots engineers were employed to obtain this information; and too, there are not other water districts available to make this feasible.

During the past 10 years as postwar expansion has moved into east Texas, the city of Mount Vernon has had many opportunities to locate industry nearby. The one factor leaving it impossible to offer our local labor and capital has been the lack of water which is so important. Our city needs water for any future expansion and we are willing to pay for it and the only feasible means we see is the White Oak Creek project. We are willing to pay for this even for just our normal use without expansion even being a consideration.

We have worked with the Red River Valley Association in trying to bring about this White Oak Creek project as it is our only hope and is also very important to this section of east Texas for another reason. It will uncover thousands of acres of the richest soil in the United States for use where now it is covered in bushes and timber and usable only a short time during the year when the weather is extremely dry. I understand figures pointing out the specific area involved will be furnished by another source so I will not take your time further.

Sincerely the people of the city of Mount Vernon, Tex., solicits your favorable opinion concerning the White Oak Creek project from a municipal standpoint. For any additional information please call on us.

Your very truly,

SAM B. HARVEY, *Mayor.*

THE CITY OF TALCO,
Talco, Tex., May 4, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control,
Public Works Committee, Washington, D. C.

GENTLEMEN: The city of Talco is badly in need of a source of water. We have only one water well and it does not produce enough water to properly serve the city. During the summer months it is very common for the well to be so overworked that sand is pumped from the well. I have been told that our well should not be made to produce over 5 hours of each 24. Last summer it was necessary for us to pump the well from 14 to 18 hours each day in order to meet the demand. We need another source of water and a dam on White Oak Creek in this vicinity would be an answer to that problem.

I trust you will see the need and call for an investigation of the problem that does exist along White Oak. In addition to the flood problem, a water reservoir would adequately serve our city and surrounding communities with a water supply.

Yours truly,

LOUIE BOND, *Water Superintendent.*

THE CITY OF TALCO,
Talco, Tex., May 5, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control,
Public Works Committee, Washington, D. C.

DEAR SIR: The city of Talco is located between Sulphur River and White Oak Creek. These two streams have been a nightmare to our people for a number of years. They overflow each year and have caused the farmers of this community, one by one, to throw in the towel. They cannot farm the bottom lands any longer due to this flood problem. We have been told something is being done about Sulphur River. That is fine, but just half of the problem is solved. What about White Oak? I believe the floodwaters along that stream should be

controlled. I know it would open up a lot of land to the farmers that is now idle.

The city of Talco does not have an adequate supply of water. New water districts to the west of us and to the southeast of us are being formed. However, we cannot benefit from those districts because the cost of transporting the water would be too great. A reservoir on White Oak would enable the city of Talco to join with other communities along the stream for a water supply. Talco has only one water well and during the summer months it is not adequate.

It is my belief that a water reservoir on White Oak Creek is necessary if we are going to utilize the natural resources of this community.

Sincerely,

JERRY JONES, *Mayor.*

THE TALCO STATE BANK,
Talco, Tex., May 5, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control,
Public Works Committee, Washington, D. C.

DEAR MR. DAVIS: It is the opinion of the officers of the Talco State Bank that a flood-control project on White Oak Creek is necessary in order to encourage agriculture in this locality.

This bank enjoyed good agriculture loans and income from agricultural products up and until about 15 or 20 years ago. As of this date we do not have a single customer who cultivates his land in White Oak Bottom. Why? Because he has been flooded too many times. He has been convinced that unless the floodwaters of White Oak are harnessed he cannot profitably farm the land.

We also believe that a water supply within our vicinity would be an added inducement to industry. We do know that there is no source of water in Talco for industrial purposes and without water we cannot even hope for new industry.

We would like to see White Oak Bottom producing agricultural products again and we believe it will if the above-mentioned problem is eliminated.

It is our sincere hope that you will see fit to endorse an investigation of the problem along White Oak Creek.

Yours very truly,

LON JONES, *Cashier.*

MOUNT VERNON, TEX., *May 5, 1956.*

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control, Public Works Committee,
House of Representatives, Washington, D. C.

SIR: May I take this opportunity to acquaint you with our individual situation as pertaining to the floodwaters of White Oak Creek of Franklin County, Tex.

Our operation on 2,100 acres of land, owned by my father, Otis H. Slaughter, is that of general crop farming and beef cattle. This operation is limited and hazardous at times due to the floodwaters of White Oak Creek, which on an average of 3 times yearly floods approximately 1,000 acres of pastureland and 200 acres of cropland.

As is most often the case, this area most subject to floods is the most fertile soil on the entire place, but without some type of flood-control project it must remain in its unimproved stage as expenditures to make the improvements it should have it not economically sound.

With protection from floods this land could be developed into some of the finest pasture in this locality, or if we so desired, land that would be capable of producing far above the average in yields of various crops.

Our situation is one of floods at certain times of the year with severe droughty periods in between. Needless to say, we would welcome a source of water supply during the droughts for irrigation of cropland to fully develop and mature our crops, which in many cases are burned by the dry, hot summer months.

It might be said that we depend upon our less fertile and less productive upland to run our operation and use the much more fertile bottom lands as the situation permits. This being where there is no danger of loss of livestock from floods and for late crops on the cultivated land.

With production of this bottom land the situation would be reversed, giving the much overworked, overgrazed upland a much needed rest and a chance to be turned idle for the few years it deserves.

Hoping this will be of some use to you.

Yours very truly,

OTIS H. SLAUGHTER, Jr.

MOUNT VERNON, TEX., *May 5, 1956.*

Hon. CLIFF DAVIS,
Chairman, Subcommittee on Public Works,
Washington, D. C.

DEAR SIR: I am writing you personally in regard to the proposed dam and reservoir on White Oak River just north of Mount Vernon, Franklin County. I have a farm not too far from the proposed project, and know very well how much this is needed in this country. People in this vicinity have left the farms due to the fact that in rainy seasons water overflows the land, and would be too dry the rest of the year. Unless we can get help to construct a dam to compound the water for irrigation and for industries we are about to our row's end.

Your support and influence for this project will be greatly appreciated by myself and the entire citizenship of this county.

Sincerely yours,

O. M. MITCHELL.

MOUNT VERNON, TEX., *May 5, 1956.*

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Public Works,
House of Representatives, Washington, D. C.

DEAR MR. DAVIS: I would certainly appreciate your giving your careful consideration to the White Oak River project which you are having a hearing on Tuesday, May 8. Our county (Franklin) is in great need of some type of program that could restore to productivity the thousands of acres of fertile land all along White Oak Bottom.

I have lived in this county almost 50 years and have seen the agriculture go down through almost all of those years. Having lived close to White Oak River, I believe I can truthfully say that flood conditions at one time of year, and extreme drought at another time has been the cause of this downfall of our agriculture program. Our county agent tells me that we have one of the most fertile soils found anywhere and it could be made productive if irrigation water were available. With a flood-control program and reservoir on White Oak River, I believe this economic failure could be eliminated. I believe that you will find the same situation in the other adjoining counties up and down the stream.

I am a farmer and cattleman working 190 acres and have done this all of my lif. I feel that with irrigation water available my production could more than double.

Please give us as much consideration as possible.

Sincerely,

S. S. NORRS.

CITY OF MOUNT VERNON,
THE STATE OF TEXAS,
Mount Vernon, Tex., May 5, 1956.

Hon. CLIFFORD DAVIS,
Chairman of Subcommittee of Public Works Committee,
House of Representatives, Washington, D. C.

DEAR MR. DAVIS: As water superintendent for the city of Mount Vernon, Tex., I would like to urge you to give your support to a dam to be constructed on White Oak Creek for the purpose of flood control and municipal water supply.

Mount Vernon has had very little growth for a number of years due mainly to inadequate water supply, we are in a locality where there is no underground

water and the terrain of the land is such that there is no site for a lake as large as we need.

In 1949–50 we hauled water from a neighboring city and our supply got as low as 40,000 gallons a number of times.

We have made every effort to find underground water by drilling wells, and finally in 1951 we constructed a small lake, and as of today it is not adequate for any growth as a municipality, and none for industry.

We have had surveys made for possibilities of taking water from other projects, but the cost of pipelines have been too costly for us.

I think a project like this on White Oak Creek would solve Mount Vernon's water problem for years to come, and I cannot too strongly encourage you to support this project.

Thanking you in advance for your consideration on this matter.

I remain,

Yours truly,

F. J. JOYCE, Jr.

MAY 5, 1956.

HON. CLIFFORD DAVIS,
Chairman, Subcommittee Flood Control Public Works Committee,
House Office Building, Washington, D. C.
(Attention Hon. Wright Patman.)

DEAR MR. DAVIS: Here is some information that might be of some value to you in considering a flood control project on White Oak Creek:

(1) About 14,000 acres of Titus County land is flooded about 3 years out of 5, thus making it unfit for agricultural production.

(2) It makes agriculture in this area that is subject to overflow, a very hazardous venture from a business standpoint.

(3) Control of floodwaters in this area would raise the agricultural value of the land from about $20 per acre at the present time, to an estimated value of $100 to $150 per acre.

(4) Would increase irrigation possibilities and raise level of farm income for at least 75,000 acres of Titus County land.

I trust this information will be of some value to you.

Very truly yours,

WILLIAM W. GRISHAM, JR.,
County Agricultural Agent, Titus County, Tex.

MOUNT VERNON, TEX., *May 5, 1956.*

MR. CLIFF DAVIS,
Chairman, Subcommittee Public Works Administration,
Washington, D. C.

DEAR MR. DAVIS: The uncontrolled waters of White Oak Creek have taken or at least forced from production 4,500 acres or more since 1936. The three other counties through which this creek flows have the same or a greater problem. The inundation of a part of this land unfit for cultivation would make much of the other land a premium.

There are three towns close enough to this projected plan to use water for their own plants. We know that some of the major industrial plants have had to move on to areas where water was plentiful, even thought we had the labor, and out of high-rent areas. We said to use the water impounded—they would have to use it.

A sprinkling of farmers are now irrigating, but from small individual structures, and the cost is high. With an adequate supply of water available irrigation farming would grow as has the livestock industry which is now the chief source of agricultural income for the county. Crop farming has become too hazardous because of overflows and prolonged dry spells. Water would give our farm people the same chance to compete in this specialized type of farming as the farmers served by the many, much larger, storage facilities.

The increase in the value of land owned by the farmers along the watershed would be a means for the county to share a part of the progress. There are about 40,000 acres drained by this creek in Franklin County, and the percentage is about the same or higher in the three other counties through which White Oak flows.

The recreational facilities afforded by this project, if it would be anything like those found on similar projects, would be worth many dollars to the people and

towns nearby. This flow of people served by the impounding of water to be used to protect people and land and to insure a stable and permanent economy, builds business, farming, and an independent people.

The economic value of a sizable dam on White Oak Creek cannot be estimated in terms of dollars and cents—but the lasting effect it would have on the survival of small towns, small businesses and an agricultural area would be as impressive as the utilization of the atom on establishing grounds for peace and the promotion of business and industry.

Yours very truly,

C. R. BROWN,
County Agricultural Agent.

MOUNT VERNON, TEX., *April 4, 1956.*

Hon. CLIFF DAVIS,
Chairman, Subcommittee Public Works,
Washington, D. C.

DEAR MR. DAVIS: I would personally appreciate you helping us in our work for the approval of a flood-control and water-conservation project on White Oak Creek, Mount Vernon, Tex. For about 30 years I have been acquainted with White Oak Creek and the habits of that stream. Every time we receive any kind of rain the whole bottom adjoining the stream is flooded. This makes it almost impossible to use any of this land productively or profitably. I am a farmer and work 144 acres in Franklin County not too far from White Oak Creek. Having been acquainted with the people who have tried to use the land in White Oak bottom, I know that they have been driven from their farms because they were unable to make a living there.

With the drought conditions that have prevailed in this county for the past 10 years, I believe that irrigation would bring back the profit to many of the farms in this county and the adjoining counties. Our farm population has decreased more than 50 percent in Franklin County in the last 10 years due to the drought conditions and the flood conditions of the bottom lands.

If you could do something that would help restore the farm economy in our county it would certainly be appreciated by me and many others. I believe that such a project as a reservoir on White Oak Creek would do more to restore this economy than anything you could do.

I also understand that the cities of Mount Vernon, Mount Pleasant, Talco, and possibly Sulphur Springs are suffering from a shortage of water.

Sincerely,

FRANK HICKS.

NEWSOM PACKING CO.,
Mount Vernon, Tex., May 5, 1956.

Hon. CLIFF DAVIS,
Chairman, Subcommittee on Public Works,
Washington, D. C.

DEAR SIR: We operate a meat processing and packing plant in the city of Mt. Vernon, Tex. and we find that there are serious limitations on the water supply for this area.

Our production depends to a great extent on the availability of a generous water supply both in sanitation and manufacturing of our product.

Several times the water supply has been inadequate here. In 1950 the city ran out of water and it was necessary for trucks to transport water in to Mt. Vernon.

We are considering an expansion program for our plant but this expansion would call on a much greater need for water.

We therefore request that you give consideration to the proposal for a Federal dam and reservoir on our natural water resource of White Oak Creek.

This proposal concerns our plant and its operations specifically, but it concerns the economic development of this area in general.

To further the present industry and to bring other industry and money into this area, it is of the utmost importance that this project be carried out.

Aside from the industrial expansion and development possible, this dam and reservoir would also be of great economical use in the income derived from the recreational facilities which a man-made lake would provide.

It is a well-known economical fact that the South could increase its income by developing its natural resources for hunting, fishing, and recreation.

We would appreciate any consideration and help you might extend on this pressing problem.

Very truly yours,

HAROLD HATCHETT.

FRANKLIN COUNTY CHAMBER OF COMMERCE,
Mount Vernon, Tex., May 5, 1956.

Hon. WRIGHT PATMAN,
New House Building,
Washington, D. C.

DEAR MR. PATMAN: Enclosed please find information requested by you pertaining to a flood control and water supply reservoir on White Oak River.

Due to many factors it has been impossible for many proponents of this project to be contacted. However, it is our opinion that a cross section of landowners, industrialists, municipal officials, and businessmen have shown their support of this project as outlined by the enclosed letters.

The four counties of Hopkins, Franklin, Titus, and Morris in northeast Texas that are now being adversely affected by floodwaters of White Oak River can realize a prosperous future with a flood-control structure and water-supply area being incorporated into our dream of water conservation. As these letters from the farmers and landowners testify it is impossible to profitably produce crops or graze cattle in the White Oak bottom. These letters further state the realized need of irrigational water for this agriculture area. It is now recognized in Texas and the Southwest that any person desiring to derive his livelihood from the soil must first be assured of flood-control protection and irrigational water.

The municipal or domestic needs as presented by our mayor, water superintendent, and others certainly show the wisdom of Congress, in making it possible for the local interest to purchase water storage in a flood-control project. As every person in northeast Texas realizes, the underground water supply is fast diminishing. Our city and others of this area will join together in forming a water district to negotiate and purchase a water-storage area within any reservoir constructed in the proximity of our city. With your leadership the peoples of the aforementioned four counties will pledge their every support in showing the economic justification of this project to those in authority and to those such as the United States Corps of Engineers making the survey.

Mr. Patman, it is our honest opinion that this survey as discussed with you will prove the justification for a reservoir on White Oak River. It is our understanding that for many years the Federal Government by action of Congress has assumed the responsibility of flood control. If this statement is true then certainly the peoples of our area deserve the same consideration as given to many other sections of our great United States.

Our only request is that the Corps of Engineers be allowed to make an extensive survey of White Oak River to determine the economic justification of a reservoir. If the survey is made we are sure that it will be recommended back to Congress as a justified project. We will be happy to work with you in any way possible to make this survey a reality.

This organization wishes to sincerely thank you for your part in making our needs known to Congress.

Sincerely,

CHARLES L. LOWRY, *President.*

WELLS LAMONT CORP.,
Mount Vernon, Tex., May 5, 1956.

Hon. CLIFF DAVIS,
Chairman, Subcommittee on Public Works,
Washington, D. C.

DEAR MR. CHAIRMAN: I am writing to you in regard to the proposed dam on White Oak Creek. The value of a water supply, such as this dam would create, is very hard to figure.

We have men, who have been reared on the farm and have the training and ability required to produce in the agricultural field, that are leaving their farms because they can't get water to their crops when they need it. Therefore, they can't continue farming on that kind of basis and these farms are idle. A water supply such as this dam would provide, would put a lot of this acreage back in production.

I personally am in the industrial field and manage a small glove plant which is the only industry in our county. While we do not demand a large supply of water, less than 2 years ago we had to give up a plan we wanted to put in effect because we could not get the water to carry on. My company is a growing concern, but I know they would not consider enlargement of their present plant unless there was an assurance of more water, which at the present is not possible.

If this dam was built so as to insure adequate water supply in this part of northeast Texas, we could get a lot of land back into production. We would have a good chance to get our share of industry to move into our locations instead of passing us up for some location that can provide the water, since no industrial plant will go into a section of the country which has no water already there.

The sad part of this whole situation is this. There are several small towns and cities in northeast Texas that are going to die of old age. This is going to happen for just one reason. The boys that graduate from our schools are not going to farm because it is too uncertain. A water supply can and will help this situation.

We don't have water to help bring in industry to provide jobs for them, so they all go to some city to seek jobs, so as to provide for the family they hope to rear. When the older citizens die, so do these small towns.

The people of Texas are proud people, but not too proud to ask for your help in a situation of this kind. It makes one heartsick to see good land idle and all our young people have to go to some other locations to seek employment because there is not a water supply available to induce some of these industries to locate in northeast Texas.

Anything you can do to help assure this water conservation program becoming a reality, will be appreciated more than words can express.

Sincerely,

NOLAN MIX, *Manager.*

Hon. CLIFF DAVIS,
Chairman, Subcommittee on Public Works,
Washington, D. C.

DEAR MR. DAVIS: I am sure you have already been told how the approval of a flood control and water conservation project on White Oak Creek would help the farmers, cities, and incoming industries in this area. Therefore I would like to express the feelings of the sportsmen.

In past years White Oak Creek was very productive as a fishing place; however in recent years due to the drought and erosion it is almost completely ruined for any type of recreation. There is no Federal project within 90 miles for the sportsmen in this area to use.

The majority of the people in our area work 6 days a week and thus cannot take advantage of these places due to distance and expense involved. Those people who can afford to take time from their work and can bare the expense of going to Caddo Lake, 90 miles, Lake Texhoma, 120 miles, or some other place are the people who can afford membership in a private club lake.

I want to speak for the people who need a place to take their families and enjoy good fishing and recreational outings without wrecking the family budget for 2 months. We need this project approved.

Also I work in a hardware store where we carry sporting goods and it is difficult for us to realize very much from this department when there is such limited facilities near us.

Many thanks for any cooperation you can give us regarding the approval of this project.

Yours truly,

BILL D. ALLEN.

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HOGAN-CAMPBELL,
Mount Vernon, Tex., May 5, 1956.

Re Proposed White Oak Creek Dam and Reservoir, Franklin County, Tex.

Hon. CLIFF DAVIS,
Chairman Subcommittee, Public Works,
Washington, D. C.

DEAR SIR: The membership of the Mount Vernon Rotary Club has asked me, as their president to make known to you their interest in the foregoing matter.

White Oak Creek meanders across the north portion of Franklin County, entering from Hopkins County on the west and flowing into Titus County to the east. The creek is a tributary of Sulphur River. Within the drainage and overflow area of the creek lie lands which potentially are the most fertile and productive in the county. However, at the present time such lands are all but worthless, both from the standpoint of cultivation and even grazing, due to the flood ravages of said stream. Until such time as the waters of said stream are harnessed and brought under control little can be achieved in the way of reclamation and improvement. We are extremely anxious to do all that we can on the local level to alleviate and improve the situation but the problems involved are too complex to make solution on the local level possible.

We earnestly request that your committee favorably consider a proposal now before you for a new study and survey to be made under prevailing conditions. We believe that a drastic change of conditions in recent years has rendered obsolete, if not useless, any previous studies which might have been made. You may be sure that any such study will receive wholehearted cooperation from our local people.

Yours very truly,

FRED HOGAN,
President, Mount Vernon Rotary Club.

LOWRY'S,
Mount Vernon, Tex., May 4, 1956.

Hon. CLIFF DAVIS,
Chairman, Subcommittee for Public Works,
Washington, D. C.

DEAR MR. DAVIS: I own and operate a department store and in addition operate the largest butane-propane business in northeast Texas with headquarters in Mt. Vernon, Tex.

In my 29 years operating a business, the last 16 years we have had the butane-propane business. Also, our rural population along the White Oak river has practically diminished because of drought condition 2 or 3 years and followed by a devastating flood which forces the farmer to give up and move out of one of most fertile regions in the United States. If only we had flood control at the proper time followed by ample water at the proper time.

The White Oak river dam projects would be most ideal to reclaim thousands upon thousands of acres of very productive land in addition to move thousands of families back in to rehabilitate the area.

I think I certainly am qualified to speak with authority when I say this is one of the most ideal locations anywhere for a project of this kind as I have personally walked over practically every mile of this entire territory the past 39 years.

Also, I am president of the Franklin County Industrial Foundation and numerous industries are very interested in moving in this most desirable area, but they ask the No. 1 question, How about your water situation? We are forced then to tell them the gospel truth. The meeting then adjourns for the lack of water.

We have the most fertile land, the climate is ideal for most everything, and if you will give the White Oak river dam project very serious consideration, it will be most beneficial to tens of thousands of good American citizens in the future.

Thank you for reading this letter as it is my sincere conviction.

Yours very truly,

L. D. LOWRY, Jr.

COUNTY OF FRANKLIN,
Mount Vernon, Tex., May 5, 1956.

Hon. CLIFF DAVIS,
Chairman Subcommittee, Public Works Administration,
Washington, D. C.

DEAR MR. DAVIS: The development of the proposed water conservation project on White Oak Creek in our county would have a very definite influence on increasing the economic agricultural development of more than half the county.

Probably the increase in taxable value of land adjoining the area would be the only gain as a financial remuneration, but, we are not looking at the project in such a light. Industry has had to bypass us because we did not have ample water to justify their location. We small towns have ideal conditions for the location of many of the manufacturing outlets, but being small, we cannot furnish the most vital commodity, water, in amounts needed to insure their location.

The control of runoff water will reclaim many acres of land both above and below the control site. The impounding of surplus water will give birth to a new type of agriculture—irrigation—in this very productive agricultural area. The irrigation movement is on now, but a project that insures ample water for the dry seasons will increase the interest and speed the development of agriculture's most profitable means of increased production.

The recreation facilities afforded by a project of this kind has always brought growth and permanent development to the cities and towns served by these wonderful conservation practices.

The development of a project of this kind in our neighborhood would be a practical step in helping to stabilize production and insure a permanent and economic system of agriculture for the entire area drained by White Oak Creek.

Yours very truly,

J. R. PRUITT, *County Judge.*

MOUNT VERNON, TEX., *May 4, 1956.*

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee, Public Works,
Washington, D. C.

DEAR SIR: I am very much interested in the White Oak conservation project in Franklin County, Tex. I have known this creek for many years and know that there is quite a body of land in there, that would be so very much benefited, by the project.

I consider the good that this would do for this section is hardly overestimated, from the standpoint of the land as well as the water.

I as a citizen and landowner of Franklin County, Tex., and member of the Red River Valley Conservation District, will be so much pleased with any assistance that can be secured in completing this project.

Very sincerely, etc.

R. T. WILKINSON.

MOUNT VERNON, TEX., *April 4, 1956.*

Hon. CLIFF DAVIS,
Chairman, Subcommittee on Public Works,
Washington, D. C.

DEAR MR. DAVIS: I would appreciate personally your helping us in our work for the approval of a flood-control and water-conservation project on White Oak Creek, located in Franklin County, Tex.

For about 30 years I have been acquainted with White Oak Creek and the habits of this stream. Every time we receive any kind of a rain the whole bottom adjoining it is flooded. This makes it almost impossible to use any of this land for farming purposes.

I am a farmer, stockman, and dairyman and have 300 acres in Franklin County and approximately 1,500 acres in Hopkins County, that joins Franklin County on the west. About 800 acres of this in the White Oak watershed. Having been acquainted with the people who have tried to use and cultivate this land in White Oak Bottom, I know that lots of them have been driven out of there and forced to leave on account of the floods.

With the drought conditions that have prevailed in this county for the past 10 years, I believe that irrigation would bring back the profit to many of the farms in this county and also for the adjoining counties. Our farm population has decreased more than 50 percent in Franklin County the last 10 years due to the drought conditions and the flood conditions of the bottom lands.

I would appreciate if you could do something that would help restore the farm economy in our county. I believe that such a project as a reservoir on White Oak Creek would do more to restore this economy than anything else I know of.

I also understand that the cities of Mount Vernon, Talco, Mount Pleasant, and possibly Sulphur Springs are suffering from a shortage of water. I would appreciate it very much if you will give and put forth every effort to aid this much-needed project in our county.

Sincerely,

LEE H. HOWISON.

STATEMENTS ABOUT CYPRESS CREEK NEAR MOUNT PLEASANT

Letter by—Robert H. Hayes, Jr., city manager, Mount Pleasant, Tex. B. M. Sandlin, chairman of the water conservation committee, chamber of commerce, Mount Pleasant, Tex. William W. Grisham, Jr., Titus County agricultural agent, Mount Pleasant, Tex. Hon. Sam Williams, judge, Mount Pleasant, Tex. John B. Stephens, Jr., Mount Pleasant, Tex.

Letter addressed to C. E. Gaddis, of Mount Pleasant, by Harry Rolnick, president, Resistol Hats, Garland, Tex.

CITY OF MOUNT PLEASANT, TEX., *May 5, 1956.*

The COMMITTEE ON PUBLIC WORKS,
House of Representatives, Washington, D. C.

GENTLEMEN: Submitted herewith is data for substantiation of the proposition that a dam and reservoir be located above Ferrells Bridge Reservoir on Big Cypress Creek.

Attached is a population graph of Mount Pleasant, Tex., which conservatively predicts anticipated growth.

The present consumption of water based on actual metering for the year 1955 is 390 million gallons per year. This averages 128 gallons per day per person. Based on 180 gallons per day per person and 11,000 population in 1975 the annual consumption is anticipated at 727 million gallons per year.

Every available source of water supply which could feasibly be developed has been utilized by the construction of three lakes. Surveys, by test wells and other exploration methods, have been conducted almost continuously since 1936 in search of ground water. As a result of this costly exploration we now have 1 deep well which produces 72 gallons per minute. This well was drilled last year during a severe water-shortage emergency.

Surveys by competent engineers have been conducted on Big Cypress Creek to determine the feasibility of development of a source of supply for Mount Pleasant and two other neighboring communities. The cost was prohibitive because of necessary construction to handle floodwaters.

The citizens of Mount Pleasant will appreciate your consideration of our water-supply needs as you survey this proposal.

Respectfully submitted.

ROBERT H. HAYES, Jr., *City Manager.*

CHAMBER OF COMMERCE,
Mount Pleasant, Tex., May 5, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control, Public Works Committee, House of Representatives, Washington, D. C.

DEAR MR. DAVIS: For several years we have made various studies in an effort to solve the critical domestic and industrial water problem of our immediate area. This study has been made with two recognized engineering firms, Brown & Root, Inc., Houston, Tex., and Forrest & Cotton, Dallas, Tex. The studies have centered on Cypress Creek and Blundell Creek, which is a tributary of Cypress, as area studies by engineers point on these as the only logical avenues for us to pursue. Both engineering firms and geologists have pointed out the growing need for

The future of agriculture in Texas lies in this area and that future must be

surface water in east Texas and particularly the several counties comprising the area immediately surrounding Titus County.

Mount Pleasant, the center of this east Texas area, and the town with more population and best growth possibilities, has been forced to ration domestic and industrial water for the past several years. Several industrial prospects have investigated and decided to locate elsewhere because of our lack of water. The Resistol Hat Co. would have located at Mount Pleasant if we had the water potential and supply. This would have meant 500 more new jobs in this area which has been declared by the Government as a labor supply disaster area and which the Small Business Administration has assigned special effort to assist in building the economy by creating jobs to eliminate this labor surplus. Also, water is desperately needed for irrigation in agriculture, which still remains the basis of our economy.

Our studies indicate that Cypress is the logical stream to use in solving the water problem for the area. We alone cannot accomplish the project locally, because of one factor. The heavy waterflow on Cypress during high-water periods makes the cost of a domestic, industrial, or agricultural reservoir structure out of our reach.

We have studied this project from every angle available to us and also in connection with other towns in this area. We have analyzed other reservoirs' possibilities: however, pumping costs plus pipelines, etc., do not show them to be economically practical. Thousands of dollars have been spent for engineering and surveys in attempts to do this job without any assistance from the Government. We have now exhausted all local efforts to provide water security for our community and must now call for your help.

Our studies of this project indicate to us that the logical solution to the water problem for the surrounding area lies in controlling the heavy runoff flow of Cypress Creek. We therefore urge you and your committee to favorably consider House Resolution 386.

Very truly yours,

B. M. SANDLIN,
Chairman, Water Conservation Committee.

MAY 5, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control, Public Works Committee,
House Office Building, Washington, D. C.
(Attention Hon. Wright Patman.)

DEAR MR. DAVIS: Listed are some facts on proposed flood control on Cypress Creek.

(1) About 8,000 acres of Titus County land is flooded about 3 years out of 5, thus making it unfit for agricultural production.

(2) It makes agriculture in this area that is subject to overflow a very hazardous venture from a business standpoint.

(3) Control of floodwaters in this area would raise the agricultural value of the land from about $20 per acre at the present time, to an estimated value of $100 to $150 per acre.

(4) Would increase irrigation possibilities and raise level of farm income for at least 30,000 acres of Titus County land.

I trust this information will be of some value to you.

Very truly yours,

WILLIAM W. GRISHAM, Jr.,
County Agricultural Agent, Titus County, Tex.

MOUNT PLEASANT, TEX., *May 5, 1956.*

Congressman WRIGHT PATMAN,
House of Representatives, Washington, D. C.

CONGRESSMAN PATMAN: I strongly urge you to make every effort to secure funds for a new Corps of Engineers survey on Cypress Creek in the northeast Texas, Titus County area.

As a landholder of 450 acres affected by flash floods on Cypress, I think this project is long overdue and much needed for the agricultural economy of this northeast Texas area.

The future of agriculture in Texas lies in this area and that future must be protected and preserved.

Sincerely,

SAM WILLIAMS.

MOUNT PLEASANT, TEX., *May 5, 1956.*

Congressman WRIGHT PATMAN,
House of Representatives, Washington, D. C.

DEAR MR. PATMAN: As an owner of 3,500 acres of highly improved farmland affected by floodwaters from Cypress Creek, I urge you to make every effort to secure a long-needed flood-control project for this northeast Texas, Titus County area.

In connection with flood control, Mr. Patman, there is also a dire need for irrigation water to insure the agricultural future of this area, which still remains the basis of economy of this area. Time and nature is proving that irrigation is the major factor which will preserve this future agriculture economy.

Sincerely,

JOHN B. STEPHENS, Jr.

GARLAND, TEX., *August 4, 1953.*

Mr. C. E. GADDIS,
Chamber of Commerce,
Mount Pleasant, Tex.

DEAR PETE: I have just returned from a 3-week trip East and find your letter of July 17; also the editorial attached, regarding our going to Longview in place of Mount Pleasant.

In my opinion, Pete, the writer of this editorial has presented a very sound policy for obtaining industry. It is a plan that, if all natural requirements were present, would induce industry to a community.

I do wish you would explain to the editor that Mount Pleasant was not outbid, dollarwise. It was not our intention, nor did we ask one town to give more than we were asking another, to locate our plant. It was all presented on the same basis. The most important item was water and the water supply. We had our engineers analyze the water from the different areas, first as to chemical content, then as to assurance of an ample supply. It was the opinion of those whom we employed for advice that since the operation of our plant depended upon an abundance of water, it would be a greater security to go where we would be assured of a constant, ample supply.

In our negotiations with your fine city, we met some wonderful people and, we hope, good friends. Believe me, it was not easy to decide against Mount Pleasant. I say to you in all fairness that the principal force in our making a decision to locate at Longview is the adequate water supply.

I hope that whenever you come through Garland, Pete, you will pay us a visit. It will always be a pleasure to see you.

My kindest personal regards and best wishes,

Sincerely,

RESISTOL "SELF-CONFORMING" HATS,
HARRY ROLNICK, *President.*

Mr. PATMAN. Mr. Chairman, the Corps of Engineers estimated the cost of this would be $60,000, but that is for a detailed survey, I think. Would it be out of order for me to ask the chairman to ascertain from the Corps of Engineers what a preliminary survey would cost? I understand they are in a position to answer it.

Mr. DEMPSEY. You mean at this time?

Mr. PATMAN. Yes, sir.

Mr. J. R. BRENNAN (Office, Chief of Engineers). Preliminary surveys of these two streams would cost a total of approximately $20,000.

Mr. PATMAN. And we would be satisfied with preliminary survey, Mr. Chairman, and I just hope that you can approve it for us so we can get a preliminary survey. The surface water is the only water we can use in that particular area.

Mr. DEMPSEY. The Chair appreciates getting that estimate so quickly. The Chair also appreciates your being satisfied with it.

Mr. PATMAN. I asked the Corps of Engineers to go into it, if you please, Mr. Chairman, and I appreciate the cooperation that they have given.

KALAMAZOO RIVER, MICH. (S. DOC. 53, 84TH CONG.)

Mr. DEMPSEY. Colonel Penney.

STATEMENT OF COL. HOWARD W. PENNEY, CORPS OF ENGINEERS, UNITED STATES ARMY—Resumed

Colonel PENNEY. Mr. Chairman, members of the committee, this report is on the Kalamazoo River, Mich., Kalamazoo and vicinity, and was authorized by a resolution of the Senate Public Works Committee on June 24, 1947.

The report is contained in Senate Document 53 of the 84th Congress.

The Kalamazoo River rises in the southern portion of the Lower Peninsula of Michigan, flows generally northwesterly, emptying into Lake Michigan about 185 miles downstream.

Kalamazoo is located about 75 miles upstream from the mouth of the river.

On this larger map, sir, the river flows west, to the left, and north up the map. This little section here fits on the end of the map.

There is no existing Federal flood-control project in Kalamazoo and vicinity. There is an authorized project at Battle Creek some distance upstream from Kalamazoo which is scheduled for initiation of construction in fiscal year 1957.

The flood problem in Kalamazoo is due to the incapacity of the existing Kalamazoo River channel to carry the flood flows. Major flooding occurs upstream of Kalamazoo, through Kalamazoo, and in the lowlands downstream and also in the Portage Creek area, which is the major tributary of the Kalamazoo River that enters Kalamazoo here in the city limits of Kalamazoo.

The largest flood of record was in 1904. There have been 10 other major floods that closely approached that flood in magnitude in the last 100 years, including the floods of 1948 and 1947. The 1947 flood covered more than 1,200 acres and flooded some 140 acres of residences, 70 acres of industry, about 100 acres of parks, 235 acres of farms. About 400 homes were flooded and about 60 commercial establishments. The estimated flood damages from that flood at present prices are $640,000.

Kalamazoo is one of the leading paper-manufacturing centers in the world, and it also has other industries concentrated there. Minor flooding occurs almost annually. The average annual damages at current price levels are estimated at $302,000.

The proposed solution provides for increasing the channel capacity of the Kalamazoo River by widening, deepening and straightening the channel from a point upstream of Kalamazoo, through Kalamazoo, and down the stream as shown in red on this map, a total distance of about 10 miles, as well as increasing the channel capacity of Portage Creek, about 8,000 feet, and, third, the construction of a low-flow-con-

trol dam downstream from Kalamazoo to maintain the existing low-water stages of the river.

The estimated cost of the project at prices as of January 1956 is $6,138,000, of which $5,358,000 is Federal and $780,000 is non-Federal, including a cash contribution equivalent to 5 percent of the cost of construction in view of the increased land use. The other requirements of local cooperation are the usual requirements of furnishing lands, holding the Government free from damage due to the construction works, maintaining the project, preventing encroachments on the improved channel after completion, modifying utilities as necessary, raising houses and roadways that may be in the spoil disposal areas that are to be provided by local interests. And there is an additional provision on this project that no Federal construction shall be initiated until pollution abatement measures at Kalamazoo satisfactory to the State of Michigan have been undertaken by local interests.

The benefit-cost ratio based on current evaluation is 1.21 to 1.

The comments of the State of Michigan and the Federal agencies are favorable. The Bureau of the Budget had no objection to this report.

That completes my presentation, Mr. Chairman.

Mr. DEMPSEY. Thank you very much, Colonel.

Mr. Johansen.

Mayor CLEM ALLEN, JR. (Kalamazoo). He had to leave for a few minutes to vote on the proposed postal increases.

Mr. DEMPSEY. I was hoping he would introduce the people who are here for his district, but I will ask Mr. Doyle to give us his statement at this time.

Mr. Doyle, we may have a quorum call any time and will have to suspend, but if you have a statement and wish to put it in the record, you may.

STATEMENT OF AUSTIN J. DOYLE, PRESIDENT, PORTAGE-AXTELL COMMUNITY FLOOD CONTROL ASSOCIATION, INC.

Mr. DOYLE. Yes, I have a statement here than can be put into the record.

I am Austin Doyle, a resident of Kalamazoo and president of the Portage-Axtell Community Flood Control Association, Inc. That deals with the residents in the areas of Portage and Axtell Creeks that are shown over here, which have flood damage, almost I's say, about three times a year. Almost every heavy rain brings a flood.

Flood conditions were part of my welcome to Kalamazoo. When I got there in 1947, I thought I'd go in there to specialize in trial work, and because of being in the FBI and other services for a few years I had to take an extra bar exam to be qualified to practice in Michigan.

Well, my furniture was unloaded from Cleveland on Saturday, and the rains started. When I went to take the bar exam, the last thing I had to do was go down in the basement and turn off the gas furnace. Water was coming in, not from the outside—I had, fortunately, a high basement—but hydrostatic pressure had broken the basement floor, and I had nice clear water in there that was just about to snuff out the furnace. So when I got back 3 days later my scrupulously

clean Dutch neighbors were all upset. Their homes had been damaged. Their homes were filled with rats that had been driven in by the flood waters. And they had lost considerable money. The plants they worked in were shut down. They were just completely upset.

So this Portage-Axtell Community Flood Control Association was set up by these people because they were just sick and tired of having flood water 3 and 4 times a year from this creek.

As my statement will show, toward the end, there is a newspaper article quoted where on a 1.35-inch rain, which is a heavy rain but is still not torrential, the city engineer back in 1942, 5 years before the 1947 flood, commented that this rain coupled with some melting snow had again flooded this particular area and that we hit minor flood stages even in heavy rains. And, as I say, that happens 3 to 5 times a year.

And we went around and organized people who had had damage. You see, the flood silt caused terrific damage. It gets in the motors in the basement. It spoils food products. As for the merchants, the flood water jostles canned goods off the shelves, breaks bottles, takes the labels off. There is tremendous indirect damage that is sustained by people.

And, incidentally, my home is a mile and a half from the river, but it's only four lots away from Portage Creek.

So, as I say, in this whole area the soil has so much water in it that when it comes along with a flood or extra heavy rains which overflow this creek, the hydrostatic pressure broke not only the basement floor in my home but a lot of other homes besides.

And in the 1948 flood an interesting thing happened. Consumers Power Co. has a dam 6 miles up the river at Comstock. The rain had been stopped for 3 days. Normal drainage had kept the water at fairly high level. Suddenly it started going down, and for 12 hours the water had been going down. It had gone down approximately an area of 5 feet. We could note that out in front of the house we could gradually start to see the street through the water. And all of a sudden the water started coming back. There wasn't a bit of rain and the sun was shining.

We found out because of the heavy flood conditions on the other side of the dam, Consumers had to open the dam to alleviate those conditions up toward Battle Creek. Down comes the water from the dam, and back up comes the water, and the current was flowing backwards in Portage Creek.

So it's a critical problem down there—the damage we might point out—like for instance the motors of my neighbors' and my furnaces, washing machines and appliances, canned foods and stored produce, clothing, furniture, and tools in their basements were coated and stained beyond cleansing, refinishing, sanitizing, or repair from silt. A large beverage warehouse had to throw away tens of thousands of bottles of beverage because when the water subsided the silt was in under the crimping of the bottle caps and the health department wouldn't let them sell it. Automobile agencies all through this area and even volunteer workers had their cars so damaged by silting and——

Mr. DEMPSEY. How frequent are these floods, Mr. Doyle?

Mr. DOYLE. Major floods come only—well, we had two in a row, 1947 and 1948, and we have had minor ones, well, every other year or two since that time. The indirect damage is terrific; I mean by way of lost wages and the damages around the houses.

Mr. DEMPSEY. You are for this project?

Mr. DOYLE. Yes, sir. You can't get insurance for it. I represent individual people——

Mr. DEMPSEY. Will you make your statement as brief as you can because we may have to go to vote.

Mr. JOHANSEN. May I interject at this point? I wonder if it would be in order, as I suggested to the other witnesses, that we simply highlight them and ask to extend in the record.

Mr. DEMPSEY. The committee would appreciate that.

Mr. BALDWIN. I have a brief question, if I may. Is there any local opposition to the project?

Mr. DOYLE. None I know of, sir. Everybody is for it.

Mr. BALDWIN. A second question. On the local contribution, $780,000, of which $282,800 must be in cash, how will that be raised?

Mr. DOYLE. I think Mayor Allen can give you the best answer to that. I represent a small group of property owners as distinct from the municipal.

Mr. BECKER. One question I would like to ask, very briefly.

Mr. DOYLE. Yes, Mr. Becker.

Mr. BECKER. Will the problem of flood by inundation be solved by this project, or will it be just the solving of the problem of flooding from the creek that runs to your property?

Mr. DOYLE. I am a mile and a half from the river, and it is going to solve my problem and also solve the whole thing all the way.

Mr. BECKER. You mentioned Portage Creek which is only four blocks or so from your property.

Mr. DOYLE. Four lots away from Portage Creek.

Mr. BECKER. I understood you to say "blocks."

Mr. DOYLE. No.

Mr. BECKER. Will that solve the problem of inundation?

Mr. DOYLE. Well, there is more than an inundation problem there.

Mr. BECKER. I know there is more, but you mentioned 35 inches of rain.

Mr. DOYLE. It will solve everything.

Mr. BECKER. If you get 35 inches of rain out my way we'd be under water altogether all year round.

Mr. DOYLE. I say 1.35.

Mr. BECKER. I beg your pardon. I understood you to say 35.

(The prepared statement of Mr. Doyle follows:)

STATEMENT BY AUSTIN J. DOYLE, PRESIDENT, PORTAGE-AXTELL COMMUNITY FLOOD CONTROL ASSOCIATION, INC.

I am Austin J. Doyle, a resident of Kalamazoo and president of the Portage-Axtell Community Flood Control Association, Inc.

Flood conditions in Kalamazoo were acutely impressed on me because they were part of my welcome to Kalamazoo, which I had chosen as the ideal city in which to engage in a specialty of trial work. I purchased a home in Kalamazoo over a mile from the Kalamazoo River but only four lots away from Portage Creek. Well, I had purchased this two-family home in a neighborhood of income properties, and had just had my furniture delivered from Cleveland when the rain started.

Three days later, with the rain still falling and I due in Ann Arbor to take the bar examination, I went to my basement, turned off the gas which was about to be snuffed out by clear water in the basement—which had broken the floor and come up through as a result of hydrostatic pressure. Our lot was on a corner, the front lower than the back. The only way out the front was by rowboat. But it was shallower out the back where we could wade in knee boots a block north to Walnut Street (for higher ground) in order to take my wife and youngster to stay with friends while I went to Ann Arbor.

The water was still there when I returned and my scrupulously clean Dutch neighbors were irate from flood damage to their homes—which were now overrun by disease-bearing rats; and from loss of income due to layoffs at the plants where they normally worked, but which were closed by flood waters. Portage Creek was actually flowing upstream at a point over one mile from the river.

The Portage-Axtell Community Flood Control Association, Inc., which I represent today, was a charitable corporation organized by these citizens of modest means, small-business men, their financially injured employees, and the merchants who suffered with them. Our membership numbered about 220 but when we circulated petitions presented to the city commission for immediate flood control measures (which petitions former City Attorney Paulsen brought for the inspection of the Board of Engineers for Rivers and Harbors in January of 1950), we had our members obtain signatures only from people directly and indirectly affected by the flooding of Portage and Axtel Creeks and over 6,800 signatures were obtained. These represented only a small percentage of those actually affected.

The city of Kalamazoo has raised the streets in our area from 2 to 6 feet and filled in yards and lots at no direct cost to the affected landowners. But that is only a minor stopgap measure. Portage and Axtell Creeks overflow primarily because of the inability of the Kalamazoo River to accept their racing waters. More water could and will lie in the creek now that mills are taking steps to eliminate the muck but no more water will get out as long as the main Kalamazoo River is flooded. The general saturation of all the valley soil as evidenced by the hydrostatic pressure which broke my basement floor at a site over a mile from the river, is indicative of the need for valleywide control.

Another incident which will demonstrate the need for valleywide and valley-length control measures is the flood a year later in the spring of 1948. The rain had been stopped for over 3 days and floodwaters were subsiding for over 12 hours, more than 5 feet, when suddenly the waters began to rise. It was reported that Consumers Power Co. opened its gates to alleviate flood conditions upstream. Down came such quantities of water from above their dam 6 miles away at Comstock, Mich., that Portage and Axtell Creeks backed up again and overflowed our ground as badly as before.

It should be pointed out that the damage caused by flooding waters was aggravated considerably by flood waste. The motors of my neighbors' furnaces, washing machines and appliances, their canned foods and stored produce, clothing, furniture, and tools in their basements, were coated and stained beyond cleansing, refinishing, sanitizing or repair. A large beverage warehouse was forced by the health department to destroy tens of thousands of bottles of beverage because of the waste, which coated the bottles and hardened under the crimping of the bottle tops. Lumber in several lumber yards was so coated and stained as not to be salable except for cheap salvage. Auto parts, new cars, customers cars, repair machines, hoists in garages, body shops, dealerships, and cars of employees and volunteer rescue workers were irreparably stained and/or completely damaged. Grocers, paint stores, restaurants, and shopkeepers of varied products lost hundreds of thousands of dollars just in the soaking off of labels and denting or breakage of metal and glass containers as jostled by floodwaters. More homeowners suffered damage indirectly from the flood than did the lesser number whose homes were washed away by the currents. This indirect damage resulted from foundations weakened either by water pressure or by settling after the waters subsided. The need for valleywide control for the protection and benefit of the individual homeowners far exceeds the need of those directly bordering the streams and main river.

In 1947 I had occasion to examine local weather station reports and local newspaper articles dealing with every day from 1920 through 1946 on which over 1 inch of rain fell. Some general conclusions drawn from that survey have led me to the conclusion:

1. That the Kalamazoo Valley in March, April, May, July, and September of almost every year is subject to torrential rainfall.
2. That an improved storm sewage system is needed.
3. That both the river and the tributaries emptying into it are primarily incapable of handling a good storm sewage system even if the city and township had them.

Most of the information I am giving you are matters either of public record through the local weather stations or are to be found in the columns of past issues of the Kalamazoo Gazette. I would particularly like to invite your attention to an article which appeared in the Gazette on March 16, 1942, speaking of a 1.35 inch rain which fell within a 2-hour period on melting snow:

"The morning's heavy downpour following closely the melting of the snow which came with last week's blizzard, swelled Portage and Axtell Creeks to the flood state * * * City Engineer Harold Andrus * * * stated that Portage and Axtell creeks usually reach a minor flood stage with every heavy rain."

Gentlemen, that article appeared 5 years before the 1947 and 6 years before the 1948 floods; that article applied to a 1.35 inch rain as opposed to the horrible floods of those 2 years.

I represent average citizens all of whom are willing to do their share at the local level but need your help to carry the burden for the balance of this sorely needed program.

We respectfully request the authorization of this project by the Congress.

Mr. DEMPSEY. Mr. Johansen, will you take the chair now?

STATEMENT OF HON. AUGUST E. JOHANSEN, A MEMBER IN CONGRESS FROM THE STATE OF MICHIGAN

Mr. JOHANSEN. Mr. Chairman, I apologize for being out of the room when you called me. I am having Post Office Committee troubles. We are trying to raise your postal rates, Mr. Chairman.

Mr. DEMPSEY. Go ahead.

Mr. JOHANSEN. I have a statement here designed to introduce the witnesses, and I ask unanimous consent to insert in the record this statement ahead of the first witness.

Mr. DEMPSEY. Without objection.

Mr. JOHANSEN. Let me read one paragraph summarizing the matter and then ask that the other witnesses very briefly summarize or merely put their statements into the record.

In answer to the question that was asked earlier, I can say that both the flooding and inundation problems along the Kalamazoo and Portage Creek will be relieved, will be solved by this proposed plan, according to our understanding from the Engineers.

The engineering studies for this project were authorized in 1947. It involves about ten miles of channel improvement in Kalamazoo River above, through and below the city of Kalamazoo and about 8,000 feet of channel improvement of Portage Creek, which is a tributary.

The benfit-cost ratio is 1.21. The estimated cost is over $6 million, and the local participation is 13 percent.

This statement of mine covers some of the flood history, and we will put that in the record.

The witnesses that I am privileged to introduce include Mr. Doyle, whom you have heard, a Kalamazoo attorney and president of the Portage-Axtell Community Flood Association, which was formed as a result of the 1947 flood to seek flood relief. The second witness is former city manager Ed Clark, a veteran of 47 years' service with the city, who was with the engineer staff at the time of the flood of 1904, the record flood. The third witness is Hon. Arthur Blakeslee, former mayor of Kalamazoo, who represents the Kalamazoo Chamber of

Commerce. And the final witness is the Honorable Clem Allen, mayor of Kalamazoo.

I respectfully suggest that the first witness put his statement in the record, that Mr. Blakeslee be permitted to speak briefly, as he has no prepared statement, and that the mayor simply highlight the statement.

I appreciate the courtesy of the committee.

Mr. DEMPSEY. That will be quite agreeable.

Mr. BECKER. Mr. Johansen, may I ask a question? Why I asked the question about the inundation and the flood from the river is that I lived through that and I knew what it was to pull water out of cellars year in and year out of my folks' home when the whole area would flood over there right up to the front porch.

The question comes in: Is the locality going to put in proper drainage systems to take care of the inundation? Unless the localities will build the necessary drainage and pumping and all the things that go along with it, no project will take care of it.

Mr. JOHANSEN. It is my understanding that the local program, whether of direct participation or indirect participation, contemplates adequate drainage. There will be adequate storm sewer installation. And if I am in any way incorrect on that, I am sure the mayor can correct it. But that aspect is, I am sure, in the picture locally.

Mr. BECKER. It certainly has to be joint if you are going to accomplish the purpose.

Mr. JOHANSEN. The community is geared to work on that basis entirely.

Mr. BECKER. That's all.

Mr. CLARK. May I answer that question?

Mr. JOHANSEN. This is Mr. Clark, former city manager, who is more competent to answer that question.

(The prepared statement of Congressman August Johansen of Michigan follows:)

STATEMENT OF CONGRESSMAN AUGUST E. JOHANSEN

Mr. Chairman, it is my privilege to present to this committee four witnesses from Kalamazoo, Mich., who will testify in behalf of authorization of the flood-control project on the Kalamazoo River in and adjoining that city.

Kalamazoo is located in southern Michigan midway between Detroit and Chicago. With a population of 71,000, it is the largest city in the Third Congressional District. It is an important industrial area, principal products including paper and paper products, pharmaceuticals, stoves, taxicabs, machine tools, and auto transmissions.

Engineering studies for this flood-control project were authorized under a Senate resolution in 1947. The project for which authorization here is sought involves about 10 miles of channel improvement in the Kalamazoo River, above, through, and below the city of Kalamazoo, about 8,000 feet of channel improvement of Portage Creek, a tributary of the Kalamazoo, and a low flow control dam below the city of Kalamazoo. The benefit-cost ratio is 1.21. Estimated cost is $6,138,000 and local participation is 13 percent.

Flood damages average about $300,000 a year, with a particularly severe flood in 1947 involving damage of some $640,000, with indirect losses running into the millions. Maximum flood of record occurred in 1904. Most recent flood was in 1948; with the freakish weather currently being experienced in Michigan, another flood is entirely within the realm of possibility this year.

For the record, and in order to avoid any possible subsequent confusion, the overall Kalamazoo River flood control program for which studies were authorized in 1947, include a program of channel improvement and construction of a

new flood channel for the Kalamazoo River at Battle Creek, about 25 miles east of Kalamazoo. This project was authorized by this committee and the Congress in 1954, and hearings have been held this year on the initial appropriation request which was submitted in the President's budget.

With respect to the request for authorization here under consideration, I can personally testify as to the support of the community and the community leadership. I have had occasion to meet on several occasions with city officials and with representatives of important industrial groups affected by the proposed program. They have given assurance of their support of the project and their desire to cooperate fully with the Army engineers.

Witnesses today include former city manager Ed Clark, whose services to the city covered a period of 47 years from 1903 to 1950. He was a young engineer with the city during the 1904 record flood, later served as assistant city engineer and city engineer and was city manager from 1938 to 1950.

Second witness is Austin J. Doyle, a Kalamazoo attorney, and president of the Portage-Axtell Community Flood Control Association, a voluntary organization of citizens formed as a result of the 1947 flood, to seek flood relief.

Third witness is the Honorable Arthur L. Blakeslee, mayor of Kalamazoo from 1937 to 1939, former president of the Kalamazoo Stove and Furnace Co., and today representing the Kalamazoo Chamber of Commerce.

STATEMENT OF EDWARD CLARK, FORMER CITY MANAGER, KALAMAZOO, MICH.

Mr. CLARK. The answer is in the area that there is a shoal just north of the north city limits which restricts the water from going down the stream, and the water raises in the river and backs up through these creeks into which our storm sewers enter. The storm sewers are there, but they back up, and then the water backs out of the creek into the storm sewers and stops them up.

You see, Kalamazoo has quite a vast area of low lands surrounded by hills.

It is in my statement.

Does that answer your question?

Mr. BECKER. Yes.

(The prepared statement of Mr. Clark follows:)

The city of Kalamazoo is located midway between Detroit and Chicago on the Kalamazoo River. The river enters the city on the east and continues to flow west to about 7 blocks east of the main retail business district, then it turns north and continues through the city to the north city limits, an approximate distance of 2.6 miles.

Adjacent to the river and for an average distance of three-quarters of a mile are located the properties that receive the greatest damage during high water. To damage these properties the water does not have to reach the height it reached in either 1904 or 1947. A goodly portion of this area is only inches above high water elevation and some of it is inundated. Much of this property was river bottom and has been filled to get away from high water.

The tributaries to the river in the city of Kalamazoo are Portage Creek with a drainage area of forty-two square miles, and Arcadia Creek with a drainage are of six square miles. Both of these streams are affected when the river rises. In Axtell Creek which is a tributary to Portage Creek, I have seen water flowing up stream well over one mile from the River. This same thing also applies to Portage Creek.

In order to be sure the river bed within the city was clean and deep the city purchased a dredge in the late 1930's and cleaned the river within its limits. This gave little relief because of a shoal just north of the north city limits.

This shoal keeps the river backed up through the city and east of the city, in Kalamazoo and Comstock townships.

The city of Kalamazoo and environs are experiencing at this time an unusual growth in industrial, retail, and home building. A great portion of Kalamazoo township has already become urban which has increased the burden on our streams. As these develop with more homes, sidewalks, pavements, and

storm sewers, more water will be added to the streams thereby making it imperative that these streams have a free outlet.

The city has a vast area of lowland surrounded by hills. As the river rises, backing up into the streams, the situation is aggravated more by the water coming from the hills. Those in the lowlands are the ones to suffer at times like this.

During the 1947 high water many residential, commercial, and industrial properties reported damages to basements, stocks, and equipment. It was only with the most strenuous around-the-clock efforts by public and semipublic employees, and many of the citizens, that most of the utility companies, commercial and industrial businesses in the affected area were able to continue to operate. Even then some were forced to close.

Serious health and fire problems were created in the flooded areas. Families had to be evacuated and others had to be moved to the second floor.

Within my memory over the past 50 years, the city had 4 other high-water experiences none of which was more than 2 feet lower than the 1947 flood.

If any flood-control project is to be built above Kalamazoo that will add to the amount of water in this area during a high water period without first having completed the Kalamazoo project, I am fearful of what might happen to our people and industry in the affected area. Kalamazoo is well aware of this hazard and expects protection in this regard.

I have deliberately left statistics out of my comments. It seems to me to be unnecessary as the report and tentative plans drawn up by the Army engineers contain all the data necessary to arrive at a solution of our problem.

May I take this opportunity to compliment the engineers for the fine job they did and to thank them for the fine cooperation they gave me. It is my opinion that their proposed plans are sufficient and should be acceptable to all concerned.

Mr. DEMPSEY. Mr. Blakeslee.

STATEMENT OF ARTHUR BLAKESLEE, CHAMBER OF COMMERCE, KALAMAZOO, MICH.

Mr. BLAKESLEE. I am going to be very brief. I represent the chamber of commerce in Kalamazoo. I am a former mayor and industrialist there, and I checked with a number of the larger industrialists in Kalamazoo to get their feeling about this river project, and they all are very interested in it.

On the river and on Portage Creek there are something like 17 mills.

Mr. BECKER. 17 what?

Mr. BLAKESLEE. 17 paper mills, mostly. I was formerly the head of the Kalamazoo Stove & Furnace Co. located on Portage Creek, and in the 1947 flood we had to close down for 2 weeks because the water got into our burners on the enamel furnaces, and there was a loss of payroll for $90,000 each week for the men plus what the company lost, as you know, indirectly.

I am sure that the city of Kalamazoo—it is a very civic-minded community—would be in a position and would contribute their part, as the engineers have suggested the amount—somewhere around $80,000. I think the whole city is for this project if you can see your way clear to grant it.

Are there any questions?

Mr. DEMPSEY. Thank you very much.

Mayor Allen, it's good to see you.

STATEMENT OF HON. GLENN S. ALLEN, JR., MAYOR OF KALAMAZOO, MICH.

Mayor ALLEN. Thank you very much, Mr. Chairman.

As I know you gentlemen work on the record and it is lunchtime, I will make this very brief and will submit the prepared statement if I may.

I also have some pictures taken at the time of the 1947 and 1948 floods which I think will portray the damage even more graphically than words.

Kalamazoo has been in favor of this project ever since the flood of 1948, and in the prepared statement I have listed seven reasons why we are for it. I won't bother to go through all of the reasons but will simply say this:

Since the flood the city has been doing everything it can. We have elevated certain streets; in fact, all of the streets where the heavy flooding occurred. But it doesn't do any good, because that doesn't protect the residences. We can't raise the houses and everything else.

One of our big problems is the water coming down the creeks. It can't enter the river because the elevation of the river rises, and, therefore, in order to solve the problem it means deepening the channel of the river for a distance of around 10 miles, as the Army engineers have pointed out, so that our community has made an annual appropriation and actually done as much as we can, but we can't solve this problem without an extensive project which is beyond our means.

Now as to the matter of financing, the several political units, the townships and the two cities that lie on the river, have jointly met, and those units which will benefit understand that they are to share in the non-Federal cost, and I am sure that we will do so. We haven't specifically said which unit will pay how much money, because we have just gotten into this, but we understand it has to be paid, and we are going ahead, and I think it will work out very well.

Mr. BECKER. Mr. Chairman, I want to ask Colonel Penney a question here while the mayor is still here. From the testimony, most of this difficulty is caused by backing up. Is that correct?

Colonel PENNEY. Yes, sir; particularly along Portage Creek it's an effect of backwater from the Kalamazoo River, and also, as the city manager or former city manager pointed out, there are constrictions in the channel in the Kalamazoo that limit the overall capacity of the channel, and one of those is a shal just downstream from the city which would have to be removed.

Mr. BECKER. That has to be removed?

Colonel PENNEY. Yes, sir.

Mr. BECKER. Well, will the low-flow-control dam that you have on there control the backflow?

Colonel PENNEY. No.

Mr. BECKER. I am talking about coming down the river.

Colonel PENNEY. No, sir. That is for the purpose of keeping the water level high enough with this improved channel so that the water levels and the low-flow stage of the river won't be reduced to such a stage as to be detrimental to the pumping that is needed for well water and also for the industrial intake, sir.

Mr. BECKER. Well, you have no fear then that the deepening of the channel will not solve the problem alone? Is that it?

Colonel PENNEY. Yes, sir; it will solve the problem. Actually about 80 percent of the flood damages in the area are estimated to be solved by this.

Mr. BECKER. And it will carry off from the storm drains and sewers the water from the inundation? It will be sufficient to carry that off without any backflow into Portage Creek?

Colonel PENNEY. Yes, sir. It's sufficient to carry a flow 50 percent in excess of the flood of record. It's designed for that capacity.

Mr. DEMPSEY. Thank you very much, Mr. Mayor.

(The prepared statement of Mayor Allen follows:)

STATEMENT BY MAYOR GLENN S. ALLEN, JR., OF KALAMAZOO, MICH.

I am Glenn S. Allen, Jr., mayor of the city of Kalamazoo, the 8th largest city in Michigan with a population of 71,000. At the rate we are growing, through annexation, we expect to be 85,000 by the end of this year. I have been mayor 3 terms and vice mayor 2 terms, and have seen at firsthand the damage done by the 1947 and 1948 floods. Right now we are sitting on top of another flood. Had last week's rains occurred here rather than at Grand Rapids, we would have one now. Thus these things are not occasional nuisances, but reoccurring major catastrophes. Kalamazoo wants Congress to authorize the proposed flood-control project on the Kalamazoo River at Kalamazoo. The city commission went on record in 1947 as desiring the project. By commission resolutions we reaffirmed this desire July 5, 1949, and March 22, 1954.

Kalamazoo requests this project for the following seven reasons:

1. To prevent a reoccurrence of extensive damage which has occurred in the past

The 1947 flood caused water to cover 590 residential lots, 300 homes, and 40 industrial and commercial establishments, some of which were the largest of our major industries. In addition, it indirectly affected by basement flooding the areas adjacent to the flood areas containing 480 residential lots, 385 homes, and 30 industries. In some areas, milk and mail was delivered by boat and the Red Cross moved in. I have five pictures which I have marked as exhibits and which graphically portray the damage. Exhibit 1 is Dutton Street in Kalamazoo in 1947 where the Kalamazoo Gazette was delivered to residents by rowboat. Exhibit 2 is South Burdick Street at Lake Street.

This is a major north-south thoroughfare in Kalamazoo and is the site of the new $1 million Sears Roebuck development. Exhibit 3 shows Jasper Street, a substantial residential area, covered with water. Exhibit 4 shows three pictures of the recreation park area in Kalamzoo Township and close to Comstock Township. This was one of the largest single areas affected by the flood and it was into this area that the Red Cross moved. Exhibit 5 shows the Red Cross moving into the Western Michigan College campus and evicting college families by boat. We understand the project which is proposed will protect us against a "design flood" which is a flood 50 percent greater than the 1947 flood.

2. The proposed project will protect our central water system

Our central water wells are located in the South Burdick-South Park Street area. In 1947 2 feet of water surrounded one of our major pumping stations in that area. The basement of the pumping station was 5 feet below the surface of the water. We sandbagged and barricaded the station and installed pumps to pump out the water, but a major health hazard was threatened and our whole central water system was jeopardized. You will see the station at the bottom of the picture marked "Exhibit 2." It is important to the health of our community to keep our water system functioning.

3. The proposed project will assist the colleges

Kalamazoo is the home of Western Michigan College with 5,500 students and Kalamazoo College with 500 students. Both schools have campuses along Arcadia Creek. In 1947 the creek flooded forcing the evacuation of married college students living in trailer camps alongside the creek. Since 1947 this

area has developed with new buildings. The Red Cross moved in to help the students and evacuated them by boat. Thus our college installations will be protected by the authorization of the proposed project.

The old athletic field of Kalamazoo College lies along the bank of Arcadia Creek and was conveyed to the city of Kalamazoo, subject to use by the college. Last fall the city commenced negotiations with the State highway department to use the field for an extension into the city of U. S. 12, which is the main route between Detroit and Chicago. We also plan to connect with the new highway a part of our one-way street system. It would be impractical to elevate the roadbed high enough to avoid a flood, and, therefore, the proposed project will prevent flood damage over a part of the interstate highway system.

4. The proposed project will preserve the older residential section from further deterioration

All large cities have housing rehabilitation programs to protect against blight and future blight in the older sections of the city. It so happens that one of these old sections of Kalamazoo is located in the East Dutton-East Walnut-Vine Street area along Axtell and Portage Creeks. The residents of this area, many of whom are Dutch, have made a sturdy effort to keep their homes in good repair. However, this was one of the residential areas hardest hit in Kalamazoo when Portage and Axtell Creeks backed up. The proposed project will assist in the prevention of future flood damage, which in turn threatens to cause the residents in this area to abandon or neglect their homes, which as a result will become a slum area.

5. The proposed project will eliminate flood-damage suits

Following the 1947 flood there was formed the Portage-Axtell Community Flood Association, Inc., a nonprofit corporation of residents in the East Dutton-East Walnut Street area. This organization threatened a $2 million damage suit against the city. While we did not believe plaintiffs would prevail, we were worried enough about the threatened suit to expand our city attorney's staff and to retain an expert engineer from the University of Michigan. If these suits had been carried through successfully, it could have cost the city taxpayers a large amount of money and actually did cost the taxpayers no small sum because of the expenditures made in anticipation of the suit.

6. The proposed project will greatly assist the outlying township areas

While I can only represent the city at this hearing, it should be called to the committee's attention that substantial flood damage also occurred both in Comstock Township and in Kalamazoo Township. In fact, one of the largest single flood areas was the recreation park area, which lies in Kalamazoo Township. Representatives from the townships are not present, but I have with me a statement from Clarence Neal, supervisor of Comstock Township, stating that the Township Board of Comstock urges authorization of the project. I also have a similar statement from Kalamazoo Township, and the city of Parchment which I will leave with the committee.

7. Future flood damage will be more extensive and occur more frequently than in the past

Kalamazoo County is among the top five counties in Michigan in percentage of population growth. Kalamazoo Township which surrounds the city was among the top 10 areas in growth in the United States from 1940 to 1950. The area of growth is not only along the river but along the several creeks which are the source of drainage of the county. These creeks are: Davis, Axtell, Portage, and Arcadia. They flow northerly to the city limits where they join the river. As the outlying area develops it becomes covered with buildings. The water doesn't absorb in the ground but flows off in its natural drainage course toward the creeks. More and more water is reaching Davis, Axtell, Portage, and Arcadia Creeks. The average height of these creeks is increasing. It thus becomes easier for the flood stage to be reached. More water is going to run into the creeks and it is a very significant increase according to city engineers.

FINANCING

In conclusion, may I say that I understand that the local community share of the total project cost is 13 percent ($709,000 of $5,580,000) based on 1954 prices. I further understand that the apportionment of the local community cost is a matter to be decided upon by the several townships, cities, and county affected

by the project. I further understand that actual appropriation of funds for the project is contingent upon the several local governmental units affected actually raising the funds. I am confident that this can and will be done.

A RESOLUTION PASSED BY THE COMSTOCK TOWNSHIP BOARD AT ITS REGULAR MID-MONTHLY MEETING APRIL 18, 1956

Whereas heretofore the District Engineer of the Corps of Engineers, United States Army, presented to the city commission of the city of Kalamazoo, Mich., a flood-control report concerning the Kalamazoo River, and has presented a proposal for improvement and control of the river and flood conditions; and

Whereas such report and proposal have been presented to the township of Comstock for an expression of attitude toward the project: Now, therefore, be it

Resolved, That after due consideration the Comstock Township Board hereby approves the plan of improvement of the Kalamazoo River presented by the Corps of Army Engineers and officially known as Document No. 53.

On a motion by Cooper, seconded by Lisk, to adopt the resolution, the following voted "Yes": Cooper, Ellwood, Lisk, Neal and Slager.

The following voted "No": None.

The chairman, Mr. Neal, thereupon declared the motion carried.

NELSON J. ELLWOOD,
Comstock Township Clerk.

STATE OF MICHIGAN,
City of Kalamazoo, ss:

I, Arlene R. Vander Roest, deputy city clerk of the city of Kalamazoo, having custody of the record of proceedings of the city commission of said city, do hereby certify that I have compared the attached copy of the resolution presented at a regular meeting of the city commission held Monday, April 30, 1956, with the original now on file and of record in this office, and that such copy is a true and correct transcript therefrom, and of the whole thereof.

In testimony whereof, I have hereunto set my hand and affixed the seal of said city, this 14th day of May 1956.

ARLENE R. VANDER ROEST,
Deputy City Clerk.

Mr. DEMPSEY. We will adjourn subject to the call of the chairman.

(Whereupon, at 12:20 p. m., the subcommittee recessed, subject to the call of the chairman.)

FLOOD CONTROL OMNIBUS BILL

TUESDAY, MAY 22, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL OF THE
COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met at 10 a. m., in the committee room, 1304, House Office Building, Hon. Clifford Davis (subcommittee chairman) presiding.

LOWER MISSISSIPPI RIVER

Mr. DAVIS. The committee will resume its session to further consider projects which may be included in the Omnibus Flood Control Rivers and Harbor Act of 1956.

We consider this a very important day because we are considering a very important river. We are delighted to have our longtime friend, Maj. Gen. John R. Hardin, with us, and we want General Hardin to come around, if you will.

General, I wish you would proceed in your own way. I am sorry that 1 or 2 other new members are not present to hear a brief summary on your part of the progress made in the lower Mississippi River, but I am sure they will be coming in right away. Up to now we have had perfect attendance in this subcommittee. We have been rather boastful about it. But I have never seen a more trying time in the Congress when so many subcommittees are competing for hours in the day. We were held up on the highway bill for weeks and weeks, and not only is this committee involved but every committee of Congress is at work. That will give you some explanation of why we do not have a better attendance here this morning. We are mighty happy to see you.

STATEMENT OF MAJ. GEN. JOHN R. HARDIN, CORPS OF ENGINEERS, AND PRESIDENT OF THE MISSISSIPPI RIVER COMMISSION, ACCOMPANIED BY H. V. DARLING, OFFICE, CHIEF OF ENGINEERS

General HARDIN. Thank you, Mr. Chairman. It is a pleasure to be here.

Would you like me to briefly outline the status of the project?

Mr. DAVIS. I wish you would, general.

General HARDIN. Mr. Chairman, if I may, I would like to talk from this chart, which covers the alluvial valley of the Mississippi, being that portion of the valley from Cape Girardeau, Mo., to Head of Passes down here where the river enters the gulf. That is the scope

of this comprehensive undertaking for flood control and navigation in the Lower Mississippi Valley.

This project, as I am sure you will recall, was authorized by the Congress in 1928. It might be said to be the basic undertaking of the Federal Government in the interest of flood control.

The project as authorized in 1928 is made up of several important parts. In the first place, the objectives, as I mentioned, were navigation, which had been the long-time interest of the Federal Government, and as a result of this act of 1928 included flood control as the first major effort of the Federal Government in a region of this character.

The project was approached in the way of a solution by strengthening the levees which had been an effort of local people in the valley for over 100 years; and then to improve the project in a fashion to make it safe from the reasonably expected flood of greater magnitude than had ever occurred. The weakness of the efforts of the public in the past in this region had been they had devised their protection always against the last flood experience, thinking it would be the biggest one they would encounter in the future; and nature always had a way to bring about a catastrophe greater than had ever been experienced.

So this project was conceived on the basis of a flood of a magnitude that had never occured but which might occur, after studying the weather records of the country and our knowledge of runoffs and hydrology, and with the assistance of the Weather Bureau meterology was brought into the project in a big way in an effort to design a project for a flood of magnitude that had never occurred.

Then it became a matter of determining how to handle a flood of that magnitude. Obviously levees alone, which had been more or less the time tried procedure, would not be adequate. Therefore, other engineering treatment was incorporated in the basic plan.

Reservoirs, of course, were known to be effective, and reservoirs were incorporated in this project to the maximum practical extent. We will point out to you the reservoirs which were in the project and which have been completed. There are four in the Yazoo Basin, Arkabutla, Sardis, Enid, and Grenada; Grenada having been completed in the last few years. To the north is the Wappapello Reservoir. That has long been completed and is functioning.

Of course reservoirs on other tributaries that feed the floodwaters to that basin have been built in successive increments on the Missouri, Ohio, and tributaries of the White and St. Francis, but those reservoirs were known to be inadequate to control the floods that could occur in this valley. However, credit was taken for the storage capacity of those reservoirs. But it was seen that even with the reservoirs in the program to supplement the levees, we had a lot of floodwaters to take care of, so floodways were incorporated in the program to allow a great river to spill that burden it could not carry to the gulf within the confines of the levees. Floodways were incorporated in the project at New Madrid so that this area of land between the frontline levee and the back line levee could be inundated and help relieve the pressure at Cairo.

Another floodway was incorporated in this region, the Tensas and Boeuf, but circumstances occurred which permitted us to return that land to useful purposes and that floodway was eliminated.

We have a floodway in the Atchafalaya Basin, where the floodwaters, when they reach the latitude of the Red River, are divided into two major parts, one part flowing past New Orleans to the gulf, and another part, actually one-half of the total, being taken care of through this floodway in the Atchafalaya Basin.

It was necessary to do that because levees could not economically be built high enough to accommodate the great flood we believe can occur. This flood is in the nature of 3 million cubic feet per second, accumulating a runoff that is 41 percent of the total runoff for the entire United States.

The flood of 1927, great as it was, would be 20 percent less than the flood which we have designed against in the various features of this project.

It was still possible to improve the river and take the burden off of other methods of treatment, so improvement of the river itself was incorporated in this project. We call it channel improvement and it includes such things as dredging and cutoffs. We have shortened the river by about 170 miles, which will give greater capacity in carrying floods to the gulf and improve the channel for navigation.

The improvement of the river, of which dredging and the cutoffs are a part, had to be supplemented by a treatment of the river's banks, because you will recall this is the alluvial valley we are treating and it is equally easy for the river to destroy its banks by its currents, whether they be normal flows or flood flows.

So a very important element of our project is the protection of the banks against the meandering tendencies of the river. We use a revetment along the banks of the river to prevent the meander of the river and hold it in a desirable pattern to prevent it from destroying the flood control works along the banks, and to prevent the river from losing the shortened length we provided at great expense with the cutoffs, and also the revetment provides for an improved navigation channel, meaning the channel can be maintained at lesser cost when we can prevent the river from backing up and carrying these tremendous loads of sand that it does when it follows this meandering pattern.

Those are four major treatments of the river proper, but I would like to point out to you, because it has bearing on some points I will discuss at a later time, that we have problems in the tributary areas.

The main stem of the river is considered the Mississippi. As it flows to the gulf, I will discuss the effect of these Mississippi waters in the tributary areas so far as backwater is concerned when the river gets in flood. Of course the waters, being at an increased level, back up into the tributaries and the areas, being very flat, are affected by floodwaters from the Mississippi. So we have these tributary problems as well as the main stem problems.

Originally our efforts were devoted principally to the main stem, but as the economy of the valley increased, and as the need for a greater degree of protection became apparent, the Congress, through successive modifications of the basic act, provided for treatment in the tributary areas, so that we now have projects in the St. Francis Basin as a part of the Mississippi River and tributaries project.

We have projects in the White Basin; we have projects in the Arkansas Basin up to Pine Bluff.

This basin here [indicating], which at one time was devoted to a floodway largely, has been incorporated in the project in the way of major drainage undertakings to protect that area from floods and from inadequate drainage.

The Red River Valley also is a feature up to the latitude of Alexandria.

The larger area, which we call the Yazoo, encompasses not only the Yazoo but Deer Creek and the Sunflower Basin, and all together is the largest tributary basin in size that is incorporated in the project.

The Atchafalaya Basin is devoted primarily to conducting floods to the gulf, but on either side of this floodway there are elements in the project which have been adopted in the interest of flood control and drainage.

Navigation should not be lost sight of in our treatment this morning, because navigation is one of the major purposes we are undertaking. This great river is increasing in importance as the inland waterway system connects, of course, with the Ohio and with the upper Mississippi and in turn with the Illinois to the Great Lakes, and then the Missouri.

The increase in tonnage on this river has been very great. Just in the lower portion from Cairo to Baton Rouge, to give you an example of the increase in traffic, I believe there were 2 billion ton-miles of traffic in 1928, and in 1954 that had increased approximately 14 times so that we had 28 billion ton-miles of traffic on the lower river.

The improvements that result from flood control and navigation in this great undertaking have of course, created a new area for the development of industry as well as greatly increased agricultural strength for the Nation, and we find today that there is developing as a result of the protection that has been afforded by this Federal project and by the advantages of waterway transportation—we find a complex developing which is leading to a greatly changed economy, incorporating industry and agriculture, for what is believed to be a better way of life.

Now, we have advanced in these 27 years of effort on this project to the point where major accomplishments can be pointed out. The levee line along the main stem totals 1,600 miles and is about 85-percent complete in terms of money. As far as serving the purpose is concerned, it has prevented three great floods from bringing devastation to the valley since the flood of 1927.

The levees are essentially complete. The work remaining to be done on them is to make same minor adjustments in certain places in height of the levee and to strengthen some levees that have sandy foundations and show signs of seepage, which will bring disaster if the seepage tendencies are not arrested. But we feel the levee situation is in rather good shape.

The channel-improvement project along the main stem of the river has been advanced with, I would say, adequate appropriations in the last few years. Of course, competing with national defense, the term "adequate" is somewhat relative, but nevertheless we have advanced with the channel-improvement work so that we can see it is one of the important features. We have about 300 miles of the river revetted so that the river is held and cannot deviate from a desirable pattern.

The work in this great floodway has been advanced to a point where it does not quite serve its intended purpose, but it could handle a

flood about the size of the one we experienced in 1927. However, that is still not enough.

In 27 years a great many things have been learned about this river that were not known before. I would like to point out that even the knowledge of rainfall in this country is of rather short duration compared to the long, long records that are found in Europe, and therefore we feel that this project, although 27 years old, is still subject to intelligent modification as we learn more about the needs from an engineering standpoint and as the economy of the basin develops.

It was for that reason that Congress several years ago directed that a comprehensive review of this entire undertaking be made and the results reported as soon as possible; that it be reviewed in its entirety and in all of its aspects.

As a result of that directive, a review has been started. The first thing that we had to do, necessarily, was to reestimate the project flood magnitude which, as I have indicated, had been estimated in 1928 on the basis of meteorological knowledge and hydrology and the help of the various Government agencies involved. We are doing the same thing again and we are making very good progress, but I do not have at this time the material to report for consideration in this omnibus bill.

There are certain features, however, that have come to light in the progress so far that appear to be timely to report to the committee, Mr. Chairman, and that is my purpose in appearing here today at your request.

Mr. DAVIS. General, to those of us who know the valley, that has been a very thrilling statement on your part. Our colleague, Mr. Becker, one of our finest Members and one who certainly goes after the facts, said it was very interesting to him but he would like to know more about it. I said I hoped he would have an opportunity to learn more about it. At the invitation of General Hardin, who is also president of the Mississippi River Commission, most members of this committee have taken the steamer at Memphis and gone all the way to New Orleans, and have had the opportunity to see the work being done on the channel, the dredging; have had the opportunity to see some of these reservoirs; have had the opportunity to see the revetments where they are taking care of the banks; and have had the opportunity to see the floodways. It is a comfortable trip, and those who have made it in other years have come back with a very deep appreciation of what this part of this great stream does for the whole country.

You will recall General Hardin pointed out this part accommodates 41 percent of the runoff water of the entire United States. So you see how big a project it has been over 27 years. The Engineers have done a most thorough job.

General Hardin said the levee system was about 85-percent completed, as I recall, but they had to consider this with the floodways, the improvement of the channel, and the cutoffs through which they cut off 170 miles of river, because the river would meander; and after considerable study they saw where they could straighten it and cut off miles and now the river sweeps to the gulf with more rapidity than in previous years.

This area has experienced in years gone by very disastrous floods with loss of lives and property.

I could not add anything to what General Hardin has said, but in my feeble way I wanted to reemphasize some of the things that he said.

If the general will proceed, then the members can ask some questions, but continue in your own way, General, because we have never had anybody who could beat you in presenting a matter of this importance.

General HARDIN. Mr. Chairman, any time anybody wants to interrupt, it certainly will not bother me.

Mr. DAVIS. Thank you, General.

CHANNEL IMPROVEMENT—CAIRO TO BATON ROUGE

General HARDIN. I would like to mention first the desirable modifications of the project which result from our greater knowledge of the river and its tendencies, showing the need for broader treatment in channel stabilization than we had heretofore anticipated being necessary.

In 1944 a report was submitted to the Congress and adopted, which recommended about $200 million of work to be done to improve the river by stabilization and other methods to provide a 12-foot navigation channel, the benefits being sufficient to offset the cost.

We have, of course, in the basic project, authorization for the use of revetments to protect the structures which are provided in the interest of flood control.

With about 15 years of intensive effort in doing the stabilization work, in which our experiment station at Vicksburg has been a most useful tool to the Engineers——

Mr. DAVIS. Pardon me, General. I should like the members of the committee to know that at Vicksburg, Miss., at this experiment station, they studied over a long period of time the St. Lawrence seaway, and on a model they translated up to the St. Lawrence and Niagara just what would be required to do. To me it is uncanny. They study with a flow of water about 8 or 10 times as big as this room. The water pours out and they study it and translate it upwards and know exactly what to do. It is almost uncanny.

Excuse me, General.

Mr. WITHROW. Is that hydraulic-research project at Vicksburg similar to the one at Bonneville?

General HARDIN. Similar, but it goes considerably beyond the facilities at Bonneville in that we have hydraulic models to study the river flow and the effects of tidal actions in addition to dams and spillways and valves. The waterways experiment station in its early years specialized in river hydraulics as a tool for the Mississippi River Commission, and it was that project that Mr. Davis was referring to.

We have another model at Clinton which it would give me great pleasure to show you gentlemen. It covers the entire watershed of the central United States which drains into the Mississippi, including the Missouri, the Ohio, the Arkansas, the White, and the Red. It is at Clinton, Miss. It started as a prisoner of war project when we had here a lot of German prisoners of war with talent and did

not know what to do with them, and it has been continued since that time.

Mr. BECKER. I am interested in this, but I would like to see this Mississippi Valley cleared up and gotten out of the way, because we have a couple of projects in New York I would like to get on. That is what I want to do. Let us get this out of the way and get done with it. We have a few things in New York, you know, in that beautiful valley known as the Hudson River Valley, and some beach-erosion projects on Long Island.

Mr. DAVIS. Well, the chairman is coming to it right now as to how much additional money will be required in this bill to take it up to 1959, I believe.

General HARDIN. Sir, without being facetious, I had a question directed to me by the Appropriations Committee and they wanted to know when we were going to get through with this project, and the only answer I could think of at the moment was I did not know when we could get through with it as long as the United States continued to grow, because this is a step by step operation as the need is demonstrated and the growth of this area continues to require additions, just as the rest of our country.

Mr. BECKER. Off the record.

(Discussion off the record.)

General HARDIN. Mr. Chairman, as a result of these studies and the experience we have had on the river in the last 15 years with the stabilization procedure, we have come to the conclusion that our previous estimates of how much of the river would have to be revetted in order to hold it into position must be increased.

We have prepared a plan which we believe to be a long-range plan, one we can work toward for the final seizure and holding of this meander pattern of the river, and we are recommending that the authorization be increased by $219 million for construction and $4,800,000 annually for maintenance, with the expectation that that money will be used not only for revetment operations but also for some dike work which will cause the river to adopt a pattern that can be revetted.

In some areas the river is so divided into a multitude of channels that we cannot treat it effectively, and it will have to be put into a more stable pattern before we can apply the revetment treatment.

Mr. DAVIS. General, how much has been authorized up to now?

General HARDIN. Mr. Chairman, the work which I am mentioning is the main stem feature of the project and that includes all the work, levees, floodways, and revetments, because it is so intermixed we have to consider it as a comprehensive whole.

The amount which has been authorized to date for navigation and flood control on the main stem is $943,376,000. The amount which we previously carried as the authorization for channel stabilization alone was $461 million.

This $219 million for the additional work will bring the total estimated cost of channel improvement work alone to $680,524,500 and the total cost for the main stem to $1,162,376,000.

Mr. DAVIS. In other words, from your studies now you require $219 million more for the channel improvements, and that would be required as an additional authorization in this bill. The reason I asked

that, we had some monetary increases lately. We took one case and want on through and I think we know our lesson on that now. That is why I asked the figures for the record.

Mr. ROGERS. Mr. Chairman, may I ask a question?

Mr. DAVIS. Mr. Rogers.

Mr. ROGERS. This $219 million additional, is that for channel improvement alone?

General HARDIN. That is for channel improvement alone, yes, sir.

Mr. ROGERS. To what reaches of the river will that apply?

General HARDIN. Only from Cairo to Baton Rouge. And I would like to make the reasons clear why that is so, because I think it is important.

As I mentioned, this is an interim report, a conclusion which is unmistakably clear at this time, but of course there is another reach of the river below Baton Rouge that will need further study before we can make a report to the Congress in connection with any needed additions in that area from Baton Rouge to the gulf.

So what I am recommending here today in the $219 million is for the portion of the river which was recommended for improvement to a 9-foot navigable depth from Cairo to Baton Rouge.

Mr. ROGERS. Did the previous authorization of $461 million cover the same area?

General HARDIN. That covered the same area but extended somewhat beyond it, in that the $461 million which was previously authorized covered the treatment of the river to New Orleans insofar as navigation was concerned.

Mr. ROGERS. That was for channel improvement also?

General HARDIN. Yes, but it also covered dredging and it covered the cutoff work which was done in the 1930's and the channel alinement work which has been done from time to time to improve the navigability of the river.

Mr. ROGERS. Maybe you have already covered this, but why is it necessary to almost double the previous authorization for channel improvements?

General HARDIN. The channel improvement which was authorized in the authorization of 1944 contemplated that if we revetted approximately 50 percent of the river between Cairo and Baton Rouge, that the river would be under control and it would not be necessary to treat it further in years to come. However, that was a slightly erroneous concept that was arrived at. There was no experience to back us up at that time, and although model studies were performed it was borne out by later experience that the river requires approximately 70 percent of its unstable banks to be held in order to keep the river from attacking in a destructive fashion the revetment which is already in place.

Therefore our concept has increased in terms of how many miles of river has to be revetted to hold it. That necessitates additional revetment to be placed, but, as I said, there are reaches of the river that are so unruly we feel we have to build some dikes that will cause the river to adopt a more uniform pattern that we can stabilize by putting in the revetments. There is $29 million for that work.

Then additional dredging is required to open channels so that the river can overcome some hard points nature has provided, and com-

bine the flow to make a more desirable river pattern. Twenty-nine million dollars is required for the dredging to be done.

The previous concepts of what were necessary to accomplish this end result were just not adequate. We had very little to go on in the way of an extensive stabilization program, and we had to learn the hard way.

Mr. ROGERS. How much money has been spent of the previous authorization?

General HARDIN. For the revetment alone——

Mr. ROGERS. What was the total spent out of the $461 million?

General HARDIN. On channel improvement, of the $461,524,000, which was the total estimated cost, appropriations to date total $328,934,000, leaving a balance to complete our previous authorization of $113,840,000.

Mr. ROGERS. So you have on hand $113,840,000?

General HARDIN. In the way of an authorization.

Mr. ROGERS. Have those funds been obligated?

General HARDIN. No, sir.

Mr. ROGERS. No obligation or planning of those funds?

General HARDIN. Planning, but actual obligations have not been incurred. The reason why we feel it is timely to obtain the permission of Congress to incorporate this work into the overall plan is that we must know what the long-term objective is in order to do today's work effectively. If we are going to adopt the revetment pattern, which we believe is the effective one, we must do work next year and the year after that.

Mr. ROGERS. Your plans have been changed somewhat and I presume that takes into consideration the changes to be made, that is, this additional request takes into consideration the changes to be made?

General HARDIN. That is right.

Mr. ROGERS.. You speak of channel improvements. Are revetments, as such, channel improvements or are they not protection for your improvements?

General HARDIN. They are channel improvements in order to finally obtain this 12-foot navigation depth which the 1944 act authorized but which we are working toward gradually by making the river a more efficient channel, efficient not only for navigation but for flood control.

Mr. ROGERS. The revetments do have a definite effect on flood control?

General HARDIN. Very definitely.

Mr. ROGERS. Which is the primary purpose, would you say, flood control or channel improvement?

General HARDIN. The primary purpose of the revetment work is to hold the river so that it will not destroy the work of man which has been put there at great expense. The river will continue to meander in generations to come unless it is stopped.

So flood control, of course, is the primary long-range objective, but navigation provides immediate benefits.

Mr. ROGERS. I am wondering if this authorization should not be for flood control rather than channel improvement.

General HARDIN. Channel improvement is looked upon as one of the major tools for reaching the objective of flood control.

Mr. ROGERS. Thank you, General.

Mr. BUSH. Would the General tell us what the mileage is from Cairo to Baton Rouge?

General HARDIN. Yes, sir; the river mileage, I presume is what you would like?

Mr. BUSH. Yes.

General HARDIN. The river mileage at Baton Rouge is approximately 230 and the river mileage up here [indicating] at Cairo is 970, so that it is 740 miles.

Mr. BUSH. Thank you.

General HARDIN. I might add one more comment, Mr. Chairman, which is that, taking this requested additional authorization into consideration and equating the costs and the benefits we have a very large margin of benefits over costs. The cost-benefit ratio is 6.1 to 1.

Mr. SMITH. I would like to call the attention of the committee to the fact that most of the projects that we have been considering have benefit-cost ratios of 1.2 to 1, or something like that, and this has a benefit-cost ratio of 6.1 to 1.

Mr. BUSH. I will say that you are on the right side of the argument, Mr. Smith.

WHITE RIVER BACKWATER

General HARDIN. Now, the next project under this comprehensive undertaking, which I would like to discuss for a moment, Mr. Chairman, has to do with the White River backwater project.

I would like to locate it for you first. It is this area here [indicating]. It is right here encompassed by that little peanut-shaped levee line. It is not a peanut by any manner of means in total size, but that is where the area is located, just above the junction of the White River with the Mississippi, just south of Helena [indicating].

That project was adopted by the Congress in 1936 and it was to construct a backwater levee, a levee which would prevent the backwaters of the White and Mississippi Rivers from inundating the area which I show you outlined by that levee line [indicating], but it had a most peculiar purpose, this levee line, in that it was to form a reservoir which in time of great floods would be inundated and take the pressure off of the levee lines above and to the east and to the south. This area [indicating] would be flooded by floodwaters when the river stage reaches a certain point, there being fuse plugs along this levee line at several locations which would enable the floodwaters to completely flood that area and to store about 3 million acre-feet of water.

The local interests contributed the land and provided the necessary assurances and, in turn, the Federal Government provided the backwater levee which would give them protection under normal circumstances and allow these very rich lands to be farmed on a successful basis, the number of times that the place would be inundated by flood flows being relatively infrequent.

Drainage structures were provided through that back levee line, and the rainwater which accumulates in this area was to flow out through these drainage structures into the White River, and in that way make it possible for agriculture to flourish.

For the last 8 years or more, it has been obvious that conditions outside of the area had a greater influence on the conditions inside the area than originally anticipated. The drainage did not flow

out of these drainage structures quickly enough so that agriculture could be carried on in a profitable manner over a lot of the acreage that is within this leveed line.

It was required of us by resolution of the Committee on Public Works, under date of September 23, 1949, to report on the justification for putting in some pumping facilities in this area to supplement the natural drainage that would be able to take the place of drainage structures which are just gate barriers.

We have made that investigation and we have come to the conclusion that it is an economically justified undertaking.

The cost of putting in the pumping plant and the necessary reinforcement or floodgates will be $2,380,000. The local interests will furnish the necessary lands, easements, and rights-of-way and will cooperate in the formulation of plans for the conservation of fish and wildlife and the maintenance of sump levels, and will do the necessary interior drainage to supplement the existing arrangement of drainage ditches.

The annual charges of this undertaking are estimated to be $221,500, and the annual benefits are $513,800, resulting in a benefit-cost ratio of 2.3 to 1.

Mr. DAVIS. That would get the water out of this confined area there to the left quicker? It does not flow out fast enough now to permit agricultural use in that area?

General HARDIN. It is primarily because of the delay. Water stays in there so long in certain years that the area cannot be planted and a crop cannot be raised due to the shortness of the season.

Mr. BALDWIN. Mr. Chairman.

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. May I ask you this question, General: In your original setup of this project, what did the Federal Government do, take flowage easements over the whole area within those outer lines?

General HARDIN. Yes, sir; but those easements were furnished to us without cost by the local interests. They obtained the flowage easements and furnished them to the Federal Government.

Mr. BALDWIN. In other words, anyone who owns the land within those outer lines is subject to the likelihood of overflow, as required by the reservoir aspects of the project?

General HARDIN. Yes; that is correct.

Mr. BALDWIN. And when you mention that there was land enhancement in the amount of $331,400, that is land enhancement of the land within this line, is it not, within that particular outlined area, as I understand it?

General HARDIN. Two hundred and twenty-one thousand, I believe I stated, Mr. Baldwin, were the charges and $513,000 were the benefits.

Mr. BALDWIN. Five hundred and thirteen thousand is the total you have listed, and for land enhancement you have $331,400 listed here.

General HARDIN. Yes, sir; I see.

Mr. BALDWIN. That is land enhancement within those lines, which simply means that you are going to take the water off the land faster, and, therefore, they can use the lands more economically every year than if the water were to stay there a longer time?

General HARDIN. That is true.

Mr. BALDWIN. How do they propose to raise this $331,400?

General HARDIN. It is not required of the local interests that they contribute to the project. The project was adopted on the basis that there would be no contribution of the local interests beyond the furnishing of the lands, easements, rights-of-way for construction and operation and providing the necessary drainage improvements, and this project providing a pumping plant is an extension of the basic project and is considered a minor extension, and, therefore, no change in the degree of local participation was considered warranted.

Mr. BALDWIN. I just wanted to be clear about that. I was not quite sure where this land enhancement was.

Mr. SCHWENGEL. Mr. Chairman, may I ask a question?

Mr. DAVIS. Mr. Schwengel.

Mr. SCHWENGEL. Another factor of the land enhancement in this, is it not, that with this big structure that you are proposing to build will come this advantage, that this area will not flood until the river reaches a certain stage?

General HARDIN. Yes, sir; that is correct.

Mr. SCHWENGEL. So what you have done with this project is that you have brought all of that land into production entirely at the taxpayers' expense and their only contribution was to give land that was not too valuable at the time they gave it; is that not right?

General HARDIN. No, sir, I think it is a little different from that in this respect: For many years before this project was adopted in 1928, those people were able to utilize those lands effectively for agriculture, because in those days the river was not confined. The flood stages of the river were not anywhere near as high as they are now with the improvements that have been made generally in the river to keep the river from breaking its bonds, and spreading over 1,500,000 acres of land. Necessarily when the river was confined, it had to go some place, and it had to go up and this placed a servitude on the area within the confines of this levee, in this respect, with the river at higher stages due to the natural confinement tendencies of the levee line, their economy, so far as agriculture is concerned, is less attractive than it was in the days when floods came down the river and spread over a great area and damaged tremendous acreages, because the flood got off quicker in the early days, back 50 years or 100 years ago, it got off those lands south of Helena quicker than now with the river held up at a higher stage due to the confinement tendency of the levees.

Mr. SCHWENGEL. The problem them is because of the Government policy to enhance our economic interests in the Midwest, here is another example of modern society interfering with nature, causing us to revert back to adopt some of the principles that nature furnished us in the beginning, and you are trying to redevelop that thinking in connection with this project, are you not?

General HARDIN. I think the natural conditions that were there, of course, were very wasteful conditions, and the great flood losses of $358 million a year which would occur on an annual average are just not suitable to the Nation's economy with the growth of population and everything that goes with it.

Mr. DAVIS. I might say, Mr. Schwengel, that what used to happen before they accomplished all of these improvements down there is

you would have a levee break down there and the water would just pour out all over the land, doing a tremendous amount of damage, and then, of course, further up the river, they would not be so much disturbed, because the water would be down here all over Frank Smith's fine farm on the Arkansas side of the river and on the Mississippi River side. If you ever visit that area down there, you will see sand away back there which destroyed much of that fine, rich, delta land because the sand and water rolled out for miles and miles over that fine farmland.

Mr. SCHWENGEL. I am very much in sympathy with this project. I am trying to develop the point that it is because of what we have done in the past in the national interest, that it is necessary to do these things now.

I am very much aware of the experimentation project at Vicksburg, which I think was a very valuable addition. I am very much in sympathy with what you are trying to do.

General HARDIN. It is the march of progress, you might say, Mr. Schwengel, inasmuch as this definitely will bring about some adjustments locally in order to compensate the interests for what they enjoyed originally and bought through this project. There is, we concede, that land-damage angle caused by these improvements, and the project is full of controls and requirements that we make, intercepted drainage, and all of the things which the works of man have brought about in these improvements.

Mr. BECKER. Mr. Chairman.

Mr. DAVIS. Mr. Becker.

Mr. BECKER. I would like to ask the general a question. When all of that land is drained off and put back into agricultural production, which is a factor here, is it not; all of that land here, when it is drained off, will be put back into agricultural production?

General HARDIN. Yes, sir; a wide fringe outside of that portion which is shaded will be brought into a higher degree of production than it has been able to enjoy before.

Mr. BECKER. After we do that and get that land back into production, will the Department of Agriculture pay these people for not producing on it, and for taking that land out of production?

Then do we pay them subsidies for the crops produced on the land and take them off their hands and put them into warehouses? I just want to know if that is going to be a part of the project. Is it reasonable to assume that?

Mr. SMITH. As Mr. Gathings knows, the landowners in that area do not have any acreage allotments to produce surplus crops.

Mr. BECKER. Which will probably be soon——

General HARDIN. Of course, these benefits as we attribute them are based on actual experience since the inception of the project. Whether or not certain practices were in being then, I am really not able to say. However, the damages are not fictitious ones but are actually experienced damages which we are endeavoring to prevent by the improvements which are proposed.

Mr. BECKER. Thank you; that is all.

Mr. DAVIS. Let us pass to the next project if there are no further questions.

BOEUF AND TENSAS RIVERS AND BAYOU MACON BASIN, ARK.

General HARDIN. The next project has to do with the Boeuf and Tensas Rivers and Bayou Macon Basin in Arkansas and Louisiana.

This project is on the form of a major drainage undertaking which was previously adopted by the Congress.

We were directed to make a review study by the Committee on Flood Control, House of Representatives, in 1946, and by the Public Works Committee of the Senate by resolution dated June 1, 1948, with the objective of determining if any additions to this project were warranted in certain locations and to report particularly upon the desirability of improving the situation at Lake Chicot, which is there in the Lake Village area.

The extensions to this project which were studied as a result of the resolutions referred to covered the areas which are indicated in green [indicating], and those which have been found to be economically justified and should be undertaken are indicated in solid green; so, on the whole, they are a rather minor expansion of a previously authorized undertaking which, as authorized, was estimated to cost some $20 million.

It is proposed that the additional work will be done at a cost of approximately $1,200,000, and the annual benefits from this overbalance the annual charges at the ratio of 4.91 to 1.

I might add that the comments of the Bureau of the Budget on this undertaking are not available.

Mr. BALDWIN. Mr. Chairman.

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. General, I see a note under this non-Federal amount of $828,000 and it says, "Cost of supplementary farm drainage used to compute annual charges." Can you explain that?

General HARDIN. Yes, sir. In order to determine whether or not there is economic feasibility in the expansion of these major drainage channels, it is necessary not only to consider how much the cost of the channel improvement that the Federal Government habitually assumes as its appropriate share of the cost, but in order to make it usable we also have to produce the plans of the local agencies that they would put into effect, the work that they would do in order to get the drainage off of the farmlands down to this main drainage channel, which the Federal Government assumes responsibility for. Without the tributary drainage, you might say all the benefits of the expenditure by the Federal Government may not be realized, and, therefore, it is a hand-in-hand proposition with the local government or State government in all probability, and the State or, certainly, the drainage districts, will have to perform certain work in order to bring about the complete usefulness of the undertaking; so we add the two together to find how much the cost will be and then equate that against the benefits.

Mr. BALDWIN. I see; thank you very much, General.

Mr. BECKER. Mr. Chairman.

Mr. DAVIS. Mr. Becker.

Mr. BECKER. I would like to get the picture of the financial aspects of this here. I am just taking figures from memory, but do I understand that the total authorization so far is about $341 million on the

channel alone, and that what you are looking for now is an additional $163 million authorization?

General HARDIN. That was just for the main channel, Mr. Becker.

Mr. BECKER. Yes.

General HARDIN. That is the main stem, so to speak.

Mr. BECKER. Yes.

General HARDIN. We are talking about a problem now in a tributary area.

Mr. BECKER. That is right. There is requested $163 million in additional authorization for the main channel?

General HARDIN. Yes, sir; for the main stem.

Mr. BECKER. Then what additional authorization is there here for the tributaries and the St. Francis Basin and all of these others? What is the total additional authorization that you are asking for?

Mr. SMITH. This particular one here is for $1,212,000.

Mr. BECKER. I was trying to get the total amount.

Mr. SMITH. It is a total of about $68 million or $69 million.

Mr. BECKER. All told?

Mr. SMITH. Yes; all told.

Mr. BECKER. Not including the main channel?

Mr. SMITH. No; not including the main channel.

Mr. BECKER. It would be about $225 million total, then, including the main channel?

General HARDIN. It is $219 million for that part of the main stem that I discussed first. The amount for the White River Backwater, which I discussed second, was $2,830,000. The one we are presently considering is $1,212,000, and the one I shall take up next is $28 million for Old River lock and the last one is for the St. Francis Basin, $35,600,000, roughly, a $286 million total.

Mr. BECKER. That is in addition to the authorizations already granted?

General HARDIN. That is correct, sir, and the total authorization granted up to this time is $1,400 million.

Mr. BECKER. Yes; I have seen that someplace.

Thank you, General.

Mr. BUSH. Right on that point, General, how much has been appropriated up until this time for your use?

General HARDIN. A total of $918 million has been appropriated through the fiscal year 1956.

Mr. DAVIS. For its 27 years of operation?

General HARDIN. Yes.

Mr. Chairman, if there are no further questions about that one, I would like to take up the next project.

Mr. SCHWENGEL. Mr. Chairman.

Mr. DAVIS. Mr. Schwengel.

Mr. SCHWENGEL. I think at this point I would like to make an observation, which is that we have a colleague on the committee who has made a very thorough study of the other side of the river, which is evidently not involved here, but I would like to have the record show that our colleague made a very fine contribution in writing his book on the Yazoo which deals with the history and the improvement of that area there. I am speaking of our colleague and friend, Mr.

Frank Smith. I recommend his book on the Yazoo for your library.

Mr. SMITH. Thank you, sir.

(Statement submitted by Mr. Norrell follows:)

STATEMENT OF HON. W. F. NORRELL, MEMBER OF CONGRESS

We are at long last in southeast Arkansas, where construction work is now reaching us from the Louisiana State line, beginning to receive some relief from the near intolerable lack of drainage which has been our lot, resulting from the closing of the natural drains when added protection from floods on the Mississippi River became necessary. This has been made possible by prosecution of the work authorized by the act of May 15, 1928, amended by the acts of 1946 and 1950, providing for channel improvements for flood control and the betterment of drainage outlets on the Boeuf and Tensas Rivers, Bayous LaFourche and Macon, Big and Colewa Creeks, Big Bayou, and canals 19, 43, and 81, in Louisiana and Arkansas.

The review of the reports on the Boeuf and Tensas Rivers and Bayou Macon, Arkansas, and Louisiana, submitted by the Mississippi River Commission on October 6, 1955, recommends an extension of the authorized project by the enlargement and/or cleanout of seven tributaries of Boeuf River and Bayou Macon in Arkansas, as follows: Enlargement of canal 18, extension; cleanout of canal 18; enlargement of Black Pond Slough; enlargement of the main canal of Kirsch Lake Canals, and main lateral; cleanout and enlargement of Fleschmans Bayou; cleanout of Caney Bayou; and clearing of Rush Bayou, these streams having drainage areas too large to be classed as local improvements and therefore justified extensions of the Boeuf and Tensas Rivers and Bayou Macon portion of the Mississippi River and tributaries project. The recommendation is subject, of course, provided local interests agree to maintain the works after completion, and accomplish associated local drainage improvements at their own expense.

Authorization of this extension will mean much to us in southeast Arkansas, than which there are few, if any, finer agricultural lands in the Nation. We need it for improvement of sanitary conditions as well. May I urge, therefore, the favorable consideration of this committee to the recommendations of the engineers.

Mr. DAVIS. All right, General, do you want to pass to the next project?

OLD AND ATCHAFALAYA RIVERS AND NAVIGATION LOCK

General HARDIN. Mr. Chairman, the next addition to the authorization of this project has to do with the Old River control project which was adopted by the Congress in 1954. At that time, it was stated that the cost of the navigation lock would be reported upon later.

The enabling legislation adopted the project in the sense that it authorized the lock to be built, but limited the monetary authorization for the undertaking to just the control features, excluding the navigation lock, and it is for the purpose of obtaining the monetary authorization for the navigation lock itself that my remarks are addressed at the moment.

We have concluded that a lock with a 1,200-foot length, a 75-foot width, with 13-foot depth over the sill at the lowest stage of the river would be adequate for the purpose.

Our estimate of cost for that structure is $28,200,000, and the cost and benefits of such a structure are really not taken into consideration at this time simply because the lock is to continue in being, an existing navigation channel which would otherwise be interrupted if the lock were not built, and would deprive the region of a navigation asset.

However, the benefit-cost ratio of the entire undertaking to control Old River, considering flood control and navigation aspects together,

has a benefit-cost ratio of 4.4 to 1. That includes the lock and all of the other controls which are necessary for the project as previously explained.

St. Francis River Basin

The next feature of this undertaking has to do with the St. Francis River Basin.

This comprehensive undertaking was adopted by the Congress by Public Law 516, approved May 17, 1950, but at the time the legislation was enacted, authorizing this undertaking, a monetary limitation was set upon it, and the limitation further said that the sums were to be appropriated, being limited to $20 million by the way, should be applied to partial accomplishment of the plan along the main stem. So, we have no mentary authorization for that portion of the adopted project which extends up into the headwaters of this basin and includes a large portion of the important Little River Project, where local interests have spent so much money of their own, and it is in this region that, until the Federal Government completes the approved portion of its plan, the improvements that the local interests have gone to such tremendous expense to provide in local drainage patterns, will never be fully effective.

We, therefore, think that the review that has recently been accomplished in this basin thoroughly justifies the authorization of the additional cost which was not covered in the $20 million limitation previously authorized, and, therefore, it is our recommendation that consideration be given to increasing the existing monetary authorization to cover the total estimated cost of the project, $55,674,000 for construction and $560,000 annually for operation and maintenance.

This will still give a very good benefit-cost ratio of 2.3 to 1.

That concludes, Mr. Chairman, the specific things that I had intended to present to the committee this morning.

Mr. Davis. Thank you, General, for your usual splendid presentation of a matter.

Are there any questions?

Mr. Smith. Yes, Mr. Chairman, I have several questions, some of which concern my district, as Mr. Schwengel kindly pointed out. All of that white space below Memphis on the margin is my district, or, roughly, that is all my district between the escarpment line and the river.

I want to ask General Hardin a question in relation to your testimony about the channel improvements, which includes the levee situation between Memphis and Vicksburg: Would this authorization give you sufficient authority to construct berms along the levees?

General Hardin. Mr. Smith, under our present plans, the existing authorization is considered to be adequate to construct those necessary levee improvements which the present project requires, but, as pointed out, this whole undertaking is under a comprehensive review, starting at the grass roots, so to speak, to recompute the magnitude of the project flood, and it will be a year, at least, before I am in a position to report whether there are any changes in the magnitude of the project flood. If there is some change in the magnitude of the project flood, then it may be necessary to recompute the cost of finishing the levees.

It is believed that there may be more freeboard required in certain areas than we have at the moment.

It may be that even the magnitude of the flood that we should adopt would warrant some changes in the height of the levees, although I do not see that that is the case in clear detail now, but nonetheless, as we understand at the moment, the present state of the project, and until it is modified, the money which is in the authorization for levees will be adequate, in my opinion, to cover the necessary changes that we have yet to do to bring the levees up to proper standards.

Mr. SMITH. One suggested convenience that may be made possible when the levees are up to the full grade and section standards is the authorization for putting roads on top of the levees. Would that be possible under this authorization?

General HARDIN. Yes, sir; under the present estimated cost of the levee feature of this undertaking, we have included the cost of materials to provide the necessary roads under the concept of the legislation enacted in, I believe, 1938 and previously in 1936, where we were authorized to build roads where levees were not accessible to highway nets. We would have predicated those improvements largely upon the cooperative assistance of the local governing bodies, either the levee boards or parishes, and, of course, it is a share-the-cost proposition, but we have in our estimates the share of the cost which we consider as workable under the present plan, the cost of furnishing the materials.

Mr. SMITH. While we are still on the overall project, do you regard that you are now in the process of including in that a study as to how irrigation can be made available to some of that area?

General HARDIN. Yes, sir; we are studying the requirement for supplemental water so-called, and also with studies of the existing features of the project to see if they can perform double duty, as well as getting this supplemental water to the point of use. It is not our purpose, however, to carry the study on to the point where it would be developing irrigation systems. It is largely to determine the requirements for water.

Mr. SMITH. It will include, however, some review of how existing installations could be used to provide supplemental water?

General HARDIN. Yes, sir.

Mr. SMITH. Where it is desired?

General HARDIN. Yes, sir.

Mr. SMITH. In relation to some of the items that are included in the area that I represent there, is there any additional authorization needed, or is it contemplated that no additional authorization is needed to complete the backwater protection project in the lower Yazoo area?

General HARDIN. No, sir; we think that the present estimated cost of that undertaking will be not in excess of what we have set up for the purpose.

Of course, again, it may be necessary at some time to change the concept of the project and have to go to a higher estimate.

Mr. SMITH. You think that the present authorization will enable you to construct the backwater protection levees without any additional authorization?

General HARDIN. That is my feeling; yes, sir.

Mr. SMITH. As to the Big Sunflower project which is already getting under construction, is the authorization adequate for that purpose?

General HARDIN. Yes, we think our authorization is adequate for that purpose.

Mr. SMITH. It had been my understanding that the cost estimates on that ran something above the authorization. What is the authorization for that project, the Sunflower project?

General HARDIN. That is $7,500,000, of which $1,001,000 has been appropriated to date, and in the fiscal year 1957 program, as you know, the amount is $875,000. It has still about $6 million to get, or $5,624,000. We think that will be adequate, Mr. Smith.

Mr. SMITH. I hope that it turns out to be adequate, and I hope that our contemplation will be accomplished by the project and will be realized.

What are the authorized figures on the Yazoo tributaries, between the Yazoo and the hills to the east?

General HARDIN. Well, the tributaries we carry as a unit. That includes all of the tributaries, and the estimate is $26,401,000, and the appropriations to date on that figure are $4,839,000, leaving a little over $21 million within the authorization.

Mr. SMITH. I had some idea that $7,500,000 was authorized for a certain portion of it. Is that accurate?

General HARDIN. That $7,500,000 figure is within this $26 million that I read to you, and it was for the so-called hill tributaries, those abrupt streams that rise on the escarpment and flow down to the delta plain of the Yazoo. This $26 million includes the Coldwater and other tributaries of the Yazoo.

Mr. SMITH. I was referring primarily to these hill tributaries between the escarpment and the main stem.

General HARDIN. Referring to the $7,500,000 for the hill tributaries, if your point is, is that adequate, Mr. Smith, I really cannot say. That is a problem which is far from being resolved at this time, as it depends so much on the soil conservation practices and all of the things that go into soil erosion. That figure of $7,500,000 I think should be looked upon only as a broad estimate for a limited amount of treatment on those necessary things that would alleviate our problem in the lower reaches of those hill tributaries. There is a lot to be done above, before that $7,500,000 can be utilized effectively below.

Mr. SMITH. There is another point probably in relation to this authorization, which I refer to as the Yazoo Headwater project, and is listed there officially as the "Tributary project." It is my understanding that flood-control work has not been authorized on the Headwater project in DeSoto and Tunica Counties. I understand that there are certain portions of that which have not been actually authorized. Is that true, General?

General HARDIN. It may be true in this sense, if it is considered in the hill tributary type of improvement, it may be that certain portions of those counties are not included, but as far as the work in the delta plan goes, those counties are covered by our project.

Mr. SMITH. That is what I wanted to make clear, any type of work that is found necessary to alleviate their problem in the delta area is presently authorized?

General HARDIN. Yes, sir.

Mr. SMITH. Thank you very much, General.

Mr. SCHWENGEL. Mr. Chairman.

Mr. DAVIS. Mr. Schwengel.

Mr. SCHWENGEL. I would just like to make this observation, that I am grateful that we have public servants who can come before us and give us testimony like this gentleman has done, and do it briefly.

Mr. DAVIS. Yes, as I said earlier, General Hardin is one of the finest engineers that we have.

Thank you again, General, for your statement.

General HARDIN. Thank you, sir; it is a privilege to be here, sir.

Mr. DAVIS. We are making progress. We have 15 minutes left today and we would like to hear from Mr. Bruce Tucker at this time, on the channel improvement of the main stem of the river which has been described earlier by General Hardin.

STATEMENT OF BRUCE TUCKER, EXECUTIVE VICE PRESIDENT OF THE MISSISSIPPI VALLEY FLOOD CONTROL ASSOCIATION, MEMPHIS, TENN.

Mr. TUCKER. Mr. Chairman and gentlemen of the committee, my name is Bruce Tucker, and I am executive vice president of the Mississippi Valley Flood Control Association with offices in Memphis, Tenn., which makes me a constituent of yours, of which I am very proud.

CHANNEL IMPROVEMENT—MAIN STEM

I would like to express to the committee the appreciation of the levee boards and the drainage districts on the lower river for the very fine consideration that we have always had from this committee, from its chairman, and from the members of the committee, of whom we are constituents in the valley, as well as from the rest of you gentlemen.

I do not want to burden you with a lengthy statement. I simply desire to file this statement for the record and to say that General Hardin has made a very fine and complete statement on the bank stabilization problem. The members of the levee boards and drainage districts believe it is not only necessary to control floods in the lower valley but also to prevent the loss of thousands of acres of our fine land besides keeping our navigation channel open, which is so important to our economy.

I think that is all I care to say at this time, Mr. Chairman. Thank you very much.

Mr. DAVIS. Thank you, Mr. Tucker, and we will make your formal statement a part of the record at this point.

(The statement submitted by Mr. Tucker is as follows:)

My name is Bruce Tucker and I am executive vice president of the Mississippi Valley Flood Control Association with offices in Memphis, Tenn.

The association is composed of the levee boards, drainage districts, and port commissions along the lower Mississippi River from Cape Girardeau, Mo., to the Gulf of Mexico. Each member body of the association is a local unit of government.

I appear here today to give the association's endorsement of the items recommended by the Mississippi River Commission and the Chief of Engineers for inclusion in the bill which this committee has under consideration.

First of all, however, the association desires to express to this subcommittee and particularly to its chairman, the Honorable Clifford Davis, its appreciation for your sympathetic consideration of our problems in the past and in connection

with this legislation. We are proud of the fact that we are constituents of three other great members of this committee in addition to the chairman. We value the help we have had through the years from the Honorable Frank Smith, the Honorable T. A. Thompson, and the Honorable Kenneth Gray.

Many other members of this committee have visited with us from time to time. We appreciate these visits, not only because we like to have you as individuals, but also because it demonstrates your real concern with our problem.

Representatives of the boards individually concerned with the various items will appear in support of the recommendations which have been presented so ably by General Hardin. On behalf of the association as a whole, I simply desire to say that each item recommended carries a high benefit-to-cost ratio and when authorized and constructed, will represent a substantial development of the resources of the particular areas.

I desire to call particular attention to the item for bank stabilization which concerns practically every board on the river above Baton Rouge.

We believe in the bank-stabilization program because we had the misfortune to live many years without it and have now had a demonstration of its effectiveness. Up until 10 years ago, thousands upon thousands of acres of the finest agricultural land in this country were being sacrificed annually to the meanderings of the river. We were losing at a rapid rate the benefits which had accrued to the middle river from the system of cutoffs completed some 15 years ago.

In those days revetment was used only as a last resort. When it was no longer possible to set back the levee, the mattresses were placed as sort of a last ditch stand. There was never enough money to properly revet a bank because the meager funds and the hundreds of miles of bank needing treatment would never allow it.

While a great deal yet remains to be done, we can already feel the tremendous benefits from the program which has been underway within the last 10 years. In the last 2 or 3 years it has been unnecessary to set back a main line levee. The loss of efficiency of the cutoffs while continuing is, we are told, at a much slower rate. Despite the excessively low flows of the last 2 or 3 years the navigation channel has been maintained without mishap.

We trust that the committee will see fit to grant the additional required authorization which has been recommended by the Mississippi River Commission. We believe that the program has proved its worth. Not only the people along the river will benefit from the results, but the eventual stabilization of the river will go far toward eliminating the hazard of a lower valley flood with all of its attendant economic losses to the Nation as a whole.

Mr. DAVIS. I should like to say to Mr. Schwengel that if you are hearing Mr. Tucker for the first time, that he is Executive Vice President of the Mississippi Valley Flood Control Association, and that he is the anchorman who coordinates all of their work up and down the river, and he works most effectively and intelligently with all the representatives of the levee boards and all of the local interests up and down the river. We owe him a debt of gratitude because he is always able to get the witnesses here, not a great number of them, but all of the important witnesses, the men who have dedicated, for the most part, a whole life to this very urgent need of ours.

Now, these gentlemen have come great distances to appear before the committee. They all have prepared statements, and we are always glad to have them here because they do speak with authority and with knowledge.

We can come back tomorrow morning and hear all of them briefly. Perhaps that would be better than to say, "Now, with all due deference we will expedite the matter." That is the language used by a former chairman of this, Mr. Will Whittington, who would expedite matters with all due deference.

The thought has occurred to me, gentlemen, that you have come here from a great distance, and that while we could simplify things if we had each of these witnesses submit a statement from the local

angle and the viewpoint of the local areas to go with the fine statements that have been made by General Hardin, starting with the White River backwater, the Boeuf and Tensas Rivers, and Bayou Macon Basin, the Old and Atchafalaya Rivers and Navigation Lock, and the St. Francis Basin projects, 1, 2, 3, 4, and the main stem, of course, as covered by Mr. Tucker, I do not think it would take too much time tomorrow to hear all of you briefly.

I am inclined to think that this is a part of the drainage program of the whole United States. This is a great and important river, and that it is important enough that we should come back here tomorrow and ask each of these gentlemen to appear before the committee, to make summary oral statements, summarizing their formal statements, and then we will make their formal statements the formal part of the record, as it is presented to the committee.

I see an old colleague back there, Mr. Chester Thompson, who, I believe, will want to come back tomorrow.

Mr. THOMPSON. Yes, sir.

Mr. DAVIS. We are always very glad to have you with us. I know that our colleague, Mr. Gathings, will want to make a statement also.

While we started 10 minutes late and we are finishing up at 10 minutes to 12, we have the civil functions appropriation bill on the floor, and naturally, General Hardin and all of you are interested in getting the funds for these projects. The Appropriations Committee appropriates the funds for our projects. We are simply the authorizing committee, and we have to be over there today to protect all of our interests.

So, we thank all of you gentlemen for your presence here today and we will see you tomorrow morning at 10 o'clock.

(Thereupon, at 11:55 a. m., the subcommittee adjourned until tomorrow, May 23, 1956, at 10 a. m.)

FLOOD CONTROL OMNIBUS BILL

WEDNESDAY, MAY 23, 1956

HOUSE OF REPRESENTATIVES,
COMMITTEE ON PUBLIC WORKS,
SUBCOMMITTEE ON FLOOD CONTROL,
Washington, D. C.

The subcommittee met, pursuant to call in room 1302, New House Office Building, at 10 a. m., Hon. Clifford Davis, chairman of the subcommittee, presiding.

Mr. DAVIS. The committee will be in order.

We changed the agenda slightly this morning and we will begin with the citizen witnesses first on the Boeuf and Tensas Rivers and Bayou Macon Basin in Arkansas.

BOEUF AND TENSAS RIVERS AND BAYOU MACON BASIN, ARK.

We are pleased to have with us this morning Mr. O. O. Kemp of Rohwer, Ark. Mr. Kemp.

Mr. Dondero, a long-time and very valued member of this committee, is not a member of the subcommittee, but he dropped in and I am delighted that he has. We are very happy to have our colleague, Mr. Dondero here, who was chairman of the full committee in the past, and whose likeness appears on the wall behind the chair present this morning.

Mr. Tucker asked me especially the other day if Mr. Dondero would be present, and I told him that I was not sure he would be. So, Mr. Tucker, I want you to say the nice things for the record that you wanted to say the other day, because he has surprised us by appearing here.

Mr. DONDERO. Only a Republican coming to the aid of a Democrat who needed none.

Mr. TUCKER. Mr. Dondero, I would like to say to you on behalf of all the levee board on the lower Mississippi that we are greatly disappointed to hear you have decided to retire from the Congress.

Mr. DONDERO. I did not. Father Time did.

Mr. TUCKER. You have been our great and good friend, and have from time to time visited with us in the valley and here in Washington. We appreciate you and hope for you the very best in retirement, and want you to know you carry with you the love and affection and the appreciation of all the flood-control interests on the lower Mississippi River in your retirement.

Mr. DONDERO. Thank you very much.

Mr. DAVIS. We certainly will miss him on this committee and I think on some of our visits down the river we will have to extend to him a special and personal invitation to join us again.

All right, Mr. Kemp.

STATEMENT OF O. O. KEMP, PRESIDENT OF THE SOUTHEAST ARKANSAS LEVEE DISTRICT AND A RESIDENT OF ROHWER, ARK.

Mr. KEMP. My name is O. O. Kemp. I am president of the Southeast Arkansas Levee District and a resident of Rohwer, Ark.

At this time I would like to present this statement by our board.

Mr. DAVIS. Without objection, it will be made a part of the record at this point.

(The statement referred to is as follows:)

ROHWER, ARK., *May 22, 1956.*

DEAR MR. CHAIRMAN AND OTHER MEMBERS OF THE COMMITTEE: My name is O. O. Kemp, reside at Rohwer, Ark., and am president of the Southeast Arkansas Levee District, and in which capacity I appear before you.

My district wishes to endorse and recommend, as far as applicable thereto, all recommendations made to you by the Mississippi River Commission and also the Mississippi Valley Flood Control Association, and especially do we wish to recommend the plan for the enlargement and cleaning out of the seven tributaries of Boeuf and Bayou Macon in Arkansas, as follows:

	Miles
Canal 19 extension	9.4
Canal 18 extension	8.8
Black Pond Slough	13.9
Kirsch Lake Canals:	
Main canal	7.1
Main lateral	1.7
Fleshman's Bayou	7.2
Caney Bayou	7.1
Rush Bayou	6.2
Total	61.9

The above project will benefit better than 120,000 acres of land and will follow through with the thought and plan of draining the southeast part of Arkansas, under the now authorized plan for draining the area covered by the Boeuf and Tensas Rivers and Bayou Macon drainage project. The benefits to be derived from such proposed improvement will greatly exceed the costs thereof. We, therefore, earnestly recommend congressional authority for the inclusion of such projects in said drainage project.

SOUTHEAST ARKANSAS LEVEE DISTRICT,
By O. O. KEMP, *President.*

Mr. KEMP. We heartily endorse the recommendations made by General Hardin on extensions of the Boeuf and Tensas River and Bayou Macon Basin projects. We think it is very necessary those extensions be made to complete that drainage project.

We also endorse the recommendation for the bank stabilization on the Mississippi River, for the simple reason that we have in my district about 5 or 6 miles of bank stabilization which has been needed to be done for about 2 years, and they tell me they have not had the money to do it, which is the reason why it has not been done. We think it is necessary to have more funds to do that job.

Thank you.

Mr. DAVIS. Thank you, sir.

function properly and raw sewage is circulated and recirculated through it

We will next hear from Mr. E. E. Hobson of McGehee, Ark. These are citizen witnesses supporting the summary and statements made by General Hardin on yesterday on the Boeuf and Tensas Rivers.

STATEMENT OF E. E. HOBSON, JR., VICE CHAIRMAN, SOUTHEAST ARKANSAS DRAINAGE ASSOCIATION

Mr. HOBSON. Mr. Chairman, my name is E. E. Hobson, Jr. I live in McGehee, Ark. I am vice chairman of the Southeast Arkansas Drainage Association and I am also attorney for drainage district No. 4, Desha County, Ark. My appearance is in behalf of one of the proposed extensions of the Boeuf-Tensas project. That is the improvement of Big Bayou ditch and Black Pond Slough, which affects most of the drainage for this drainage district No. 4, and also provides for whatever drainage and sewage disposal the city of McGehee enjoys.

We wish heartily to endorse the proposed extensions, as testified to by General Hardin, and in support of that, if I may, I wish to file a prepared statement of the board of commissioners of my district.

Mr. DAVIS. Without objection it is so ordered and it will be made a part of the record at this point.

(The statement referred to is as follows:)

STATEMENT OF BOARD OF COMMISSIONERS OF DRAINAGE DISTRICT NO. 4, DESHA COUNTY, ARK.

Mr. Chairman and members of the committee, drainage district No. 4, Desha County, Ark., was organized and exists for the purpose of providing drainage for that portion of Desha County, Ark., that lies west of Crooked Bayou. The area served by the district is approximately 24,000 acres and it includes the city of McGehee. The district is a member of the Southeast Arkansas Drainage Association.

Approximately half of the land included within the limits of the district has been cleared and is in crop production. The lands that are well drained are fertile and are in a high state of cultivation. McGehee is the trading center for most of the people in Desha County and its location on the main line of the Missouri Pacific Railroad and on the main highways of this part of the State provides an excellent marketing situation.

Drainage District No. 4 has two principal ditches; namely, Black Pond Slough and Big Bayou Ditch, within its area of responsibility. The latter ditch has been recently improved by the Corps of Engineers, Vicksburg District, and it now furnishes adequate drainage for the lands in the western portion of the district. Black Pond Slough, which is adjacent to the city of McGehee and which provides all of the drainage including sewage for the city, joins Big Bayou Ditch in the general vicinity of Bel Aire, Chicot County, Ark. This drainage then proceeds to the south into Boeuf River-Bayon Macon drainage system. The junction of Big Bayou Ditch and Black Pond Slough is the present head, or northernmost point, of the present authorized project.

Prior to the above-mentioned improvement on Big Bayou Ditch the board of commissioners of this district gave its assurance that it would forever maintain the work done thereon. A maintenance tax is now being levied and collected in the district for the purpose of performing this maintenance, and this board will, as soon as adequate funds have been collected, carry out its contract to maintain said works.

The drainage afforded by Black Pond Slough on the eastern side of the district is woefully inadequate. From its headwaters just to the north of McGehee this slough proceeds to the south to the Desha County line, thence into Chicot County (into the area of responsibility of Dermott Drainage District) to the junction hereinabove mentioned. Through the years this slough has become inoperable through silting and through the additional waters that have been turned into it. In rainy seasons this slough fills and overflows and a large portion of McGehee is inundated. When this occurs the sewer system cannot

function properly and raw sewage is circulated and recirculated through it. This situation has been described by the Arkansas State Board of Health as being an extreme health hazard. In a statement presented on March 30, 1951, at Vicksburg, Miss., before the Corps of Engineers, it was stated by a representative of said board of health that: "If adequate drainage were provided the above possibilities of hazards to public health would be alleviated or eliminated."

It is the belief of this board that this drainage deficiency prevents further expansion of the city of McGehee, as well as further development of that part of Desha County in the Black Pond Slough area. To the contrary, we believe that the contemplated enlargement of the 13.9 miles of Black Pond Slough will result in expansion of this portion of Desha County and that the health of its citizens will be removed from its present hazardous situation. We believe that the money to be spent would be a wise investment in this portion of southeast Arkansas and that it will be returned to the Federal Government many times over through added production and increased valuations and taxation.

This board wishes to give further assurance that the work to be done will be maintained and it is earnestly hoped that this committee will recommend the enactment of legislation to accomplish this vital project for our people.

Mr. DAVIS. I wish to inform the committee members that of course they can interrupt me at any time they seek to ask questions. We are trying to make a little progress this morning. These gentlemen are here in support of the recommendations made by Major General Hardin, who appeared on yesterday as president of the Mississippi River Commission. For the record, I am delighted to show that all up and down the lower Mississippi, on the part of you and all the other witnesses, there is complete approval on the part of the local authorities and the people generally in support of this continued program.

Mr. HOBSON. Yes, sir.

Mr. DAVIS. Thank you very much.

We will next hear from Mr. James N. Smith, of McGehee, Ark.

STATEMENT OF JAMES N. SMITH, REPRESENTING THE CYPRESS CREEK DRAINAGE DISTRICT OF DESHA, CHICOT, AND LINCOLN COUNTIES, ARK.

Mr. SMITH. Mr. Chairman and members of the committee, I am James N. Smith, of McGehee, Ark., representing the Cypress Creek Drainage District, of Desha, Chicot, and Lincoln Counties, Ark. Our district is situated within the Boeuf and Tensas Rivers and Bayou Macon portion of the project. Our special interest in this is the including in this project of canal improvement to canal No. 18, and the extension of canal No. 19, as recommended by the Corps of Engineers. We certainly approve and endorse the recommendations of the Corps of Engineers, and in support of that we have prepared a statement which we would like to file for the record.

Mr. DAVIS. Thank you, sir.

Without objection, it will be made a part of the record at this point.

(The statement referred to is as follows:)

STATEMENT OF CYPRESS CREEK DRAINAGE DISTRICT OF DESHA CHICOT, AND LINCOLN COUNTIES, ARK.

Mr. Chairman and members of the committee, I am James N. Smith, of McGehee, Ark., attorney for Cypress Creek Drainage District of Desha, Chicot, and Lincoln Counties, Ark. The Cypress Creek Drainage District extends over most of the county of Desha and part of the counties of Chicot and Lincoln, in southeast Arkansas, comprising a total of about 262,700 acres.

The outlet for surface waters in this area is to the south, into Louisiana and ultimately into the Mississippi River. This runoff is carried principally by canals No. 19, No. 43, and No. 81, which were constructed by local interests at

great expense to the local people. It was realized, however, that these facilities were not adequate and that many thousands of acres of fertile lands were subject to annual overflows, and other thousands of acres were allowed to remain or to become nonproductive because of excessive surface water, so the Flood Control Act of May 15, 1928, as amended, authorized the improvement of the said canals 19, 43, and 81, intending to afford relief from this situation.

We sincerely appreciate the benefits that have been bestowed upon this alluvial valley and that are yet to accrue as a result of the above-mentioned act, and are anxiously awaiting the time when the project will be completed. We earnestly urge, however, that consideration be given to the following facts, so that the project may be ultimately much more effective:

CANAL NO. 18

Situated within our district, in addition to the three afore-mentioned canals, is Canal No. 18. This canal is a tributary to the main Canal No. 19, and if properly improved, would add immeasurably to the success of the authorized project by furnishing an outlet for surface waters over a large area which would otherwise be benefited very little by the authorized project. While the improvement of Canal 19 is presently authorized in this vicinity, there is no way for excess water to find its way into Canal 19 except by way of Canal No. 18, and the condition of Canal 18 at present is such that it is almost totally ineffective because of growth and sediment, said canal having been constructed some 50 years ago.

Canal No. 18 is located to the west of the main Canal No. 19, and flows into Canal 19 at a point in the south part of Desha County. Approximately 22,000 acres of rich farmland would be benefited by its improvement, and the heavy financial losses of the area annually, due to the flooding of land, would be greatly diminished.

CANAL NO. 19 EXTENSION

Canal No. 19, as previously identified, is a main artery for the runoff of surface waters in southeast Arkansas. The improvement of this canal has been authorized to a certain extent by Congress under the Flood Control Act of May 15, 1928, as amended. This act does not, however, authorize the improvement of the entire canal, and we believe that the inclusion in this project of an additional 9.4 miles will certainly be justified by the benefits to be derived therefrom. The extension to which we refer would be a continuance northward from the upper end of the now authorized project, in Lincoln County, Ark. It is a natural part of the project and would furnish relief from overflow water to approximately 147,000 acres of land.

The Cypress Creek Drainage District appreciates the opportunity of presenting its statement to this committee, and urges that its requests be approved and that the Flood Control Act of May 15, 1928, as amended, be modified to provide for the additional improvements as outlined herein.

Mr. DAVIS. Thank you so much.

Mr. SMITH. Thank you. We appreciate the opportunity of appearing before you.

OLD AND ATCHAFALAYA RIVERS AND NAVIGATION LOCK

Mr. DAVIS. We pass next to the project taken up on yesterday, covering the Old and Atchafalaya Rivers and Navigation Lock.

When we get Mr. Baldwin and Mr. Bush and others down the river I think they are going to find a lot to interest them down the river. Mr. Dondero thoroughly enjoyed it when he went down. It took us 3 days and nights, but you will see when you get down to this point where this lock is that the water really divides there. Part of it goes down through New Orleans and there is a part that goes through the Old River and Atchafalaya, which is a vast river with a strong current. There was a likelihood before the approach of the Corps of Engineers that the river would change its course and leave the city of New Orleans high and dry as far as the Mississippi River was concerned.

So the Army engineers will divide the water as the need occurs, and protect the area from flood conditions. It is a most thrilling thing to look at what the Corps of Engineers have been doing on the river in the lower river reaches, where finally 41 percent of the surface water of the country must pass to the gulf.

Mr. TUCKER. Mr. Myers, as you know, is Chief Engineer of the Department of Public Works of Louisiana. He was here on yesterday, but their legislature is in session down there and he found it necessary to return and asked me to file with the committee his statement for the support of the authorization of the bank stabilizaion item and the lock at Old River.

Mr. DAVIS. Thank you. He is a good engineer and I know his statement will be good. It will be made a part of the record at this point, without objection.

(The statement referred to is as follows:)

STATEMENT IN SUPPORT OF AUTHORIZATION FOR CHANNEL IMPROVEMENT AND OLD RIVER LOCK, MISSISSIPPI RIVER AND TRIBUTARIES

By the State of Louisiana Department of Public Works, May 1956

The Department of Public Works of the State of Louisiana joins the other States in the alluvial valley of the Misissippi River in urging Congress to authorize modification of the existing flood-control project, Mississippi River and tributaries, to permit the Corps of Engineers to fix and maintain the river in a permanent location between Cairo, Ill., and Baton Rouge, La., in the interests of flood control and navigation, and in accordance with recent recommendations of the Chief of Engineers.

The Department also urges the Congress to authorize construction of the navigation lock at Old River, La., an essential element in the Old River project to prevent diversion of the Mississippi River through the Atchafalaya River, a project already authorized and now under construction.

CHANNEL IMPROVEMENT AND BANK STABILIZATION, MISSISSIPPI RIVER, CAIRO, ILL., TO BATON ROUGE, LA.

The Mississippi River under natural conditions is free to meander back and forth in time across the entire 38 to 109 mile width of its alluvial valley below Cairo, Ill. The river flows for 1,018 miles through the silty and sandy soils of this narrow valley to reach the gulf, but nowhere in its length can it be said with certainty that it will occupy the same position at some future date. The river is still a wandering stream, and has never been controlled to a degree where it could be fixed in a permanent location.

In the early stages of the flood-control program, it was absolutely essential to provide the maximum protection as quickly as funds and facilities would permit, hence levee building was given priority during this period. As the levee-building program was developed, because of limitations in levee heights due to foundation conditions, it became necessary to reduce flood stages by improving channel conditions to pass flood flows more quickly, and 16 cutoffs were made across river bends, shortening the river by 170 miles.

After shortening the river, it then became necessary to hold the favorable alinement by revetment and other channel stabilization measures, otherwise the river would continue caving its banks and rapidly regain its original length. These stabilization measures not only became an integral part of flood control, but also maintained a deep channel for navigation up to Cairo and the Ohio River.

Now that we have more experience and a greater knowledge of the river's behavior, its action on the banks at high and low stages and flows, it has become apparent that earlier authorizations for bank and channel improvement are not sufficient to fix the river in a permanent location.

What effect will failure to confine the river to its present channel have on the Nation? First, channel stabilization of the Mississippi River is an integral, inseparable, and essential part of the authorized flood-control project. Without it, the entire 1,080 miles of levees between Cairo and Baton Rouge

are merely a temporary expedient against floods, for from time to time and throughout this reach, banks will cave and the river will eventually occupy present levee sites. In many places it will abandon its channel and create another in a new location, requiring construction of more new levees.

Secondly, flood stages will rise if the channel is permitted to meander, and foundation conditions will not permit a sufficient increase in heights of levees to confine the floodwaters. Hence channel stabilization is absolutely necessary to preserve the existing flood-control program.

Thirdly, the channel must be stabilized to maintain the present navigation channel, otherwise shoaling and a constantly shifting channel will disrupt navigation. Commerce on the river in this reach has grown from 2 billion ton-miles in 1928 to 12.5 billion in 1955, and a further increase of over 50 percent to 19 billion ton-miles is forecast over the next 20 years. This volume of waterborne commerce, or even the present volume, will not be possible without measures to insure a stable navigation channel. The Mississippi River is the main element in the most extensive inland waterway system in the world.

Finally, as a result of the flood-control program, all of the States in the alluvial valley have made tremendous economic advances. The security afforded by flood-control works has enabled an area once largely agricultural to develop its natural resources, and industrial and economic development with accompanying population growth has been rapid. Transcontinental railroads, highways, bridges, and oil and gas pipelines cross the valley, all of first importance to national security. All of these economic values and those of importance to our national defense are dependent upon a stable channel in the Mississippi River.

In the light of more intense study and practical experience, the Corps of Engineers has determined the most favorable alinement of the river for both flood control and navigation, and has developed a plan of channel improvement and bank stabilization for maintaining this alinement. The Department of Public Works supports the recommendations of the Chief of Engineers, and urges Congress to modify existing flood-control legislation to include additional channel improvements on the main stem of the Mississippi River between Cairo, Ill., and Baton Rouge, La., at an estimated cost of $219 million.

OLD RIVER NAVIGATION LOCK

The plan for Old River control was approved and authorized by the Flood Control Act of 1954 but an appropriation limitation of $47 million was imposed, although authority to initiate construction of a lock within the monetary limitation, subject to approval by the Chief of Engineers of its type and dimensions, was contained in the act. Approval of lock plans has now been obtained, and the Department of Public Works recommends that Congress increase existing authorization by $28,200,000 to $75,200,000 to include construction of the lock.

The Old River project will prevent the Mississippi River from changing its course to that of Old and Atchafalaya Rivers. Should this occur, the investment of the United States in flood control and navigation works below Old River would be destroyed, and the vast industrial complex between New Orleans and Baton Rouge would be without sufficient quantities of fresh water to supply their needs.

The lock is an integral part of the project, for Old River cannot be controlled and navigation maintained between the Mississippi and Red and Atchafalaya Rivers without it. The Atchafalaya River is a link in the Mississippi-Gulf Intracoastal system and provides a short cut between eastern and western points. Its importance as a main artery of commerce is increasing, and the Corps of Engineers has recently dredged the lower reaches of the stream to provide minimum channel dimensions of 12 by 125 feet.

The lock must be constructed to maintain the existing navigation pattern, otherwise the cities and towns along the Atchafalaya and all of central Louisiana will lose the benefits of waterborne transportation. It must be in operation before the low-sill closure structure is completed. Because of its importance to Louisiana, the department of public works requests that existing authorization be modified to include cost of the lock as approved by the chief of engineers.

St. Francis River Basin

Mr. Davis. Now we pass to the St. Francis River Basin. Our longtime friend, Billy Huxtable, of West Memphis, Ark., is here. We are

delighted to have so distinguished an engineer as Billy Huxtable with us today, because he has given a lifetime of very effective and useful service to this important problem. He lives it and loves it. Mr. Huxtable.

Mr. DONDERO. Mr. Chairman, may I say if he lived in the North, we have a saying that would apply to him. He is a man whose temples have been silvered by the snows of many winters.

STATEMENT OF W. G. HUXTABLE, WEST MEMPHIS, ARK., CHIEF ENGINEER OF THE ST. FRANCIS LEVEE DISTRICT

Mr. HUXTABLE. Mr. Chairman, I am W. G. Huxtable, chief engineer of the St. Francis Levee District of Arkansas, West Memphis, Ark.

My levee district is responsible for 158 miles of main levee on the west bank of the Mississippi River. Besides that we are sponsors for a project in the lower part of the St. Francis Basin, which comprises a considerable amount of area, and I would like for you to turn to this little map attached to the statement I am filing so that you can follow this.

I have numbered the points I would like to point out to you.

No. 1 is the diversion channel at the north end of the basin, which takes the runoff from the Ozark Hills to the north of it. That is diverted to the Mississippi River at Cape Girardeau, and provides an outlet we do not have to take care of through our flood-control structure down below.

No. 2 is the Wappapello Reservoir, which was completed in 1941 and cost about $8 million. It takes care of another section of that runoff and regulates the flow into the basin. It never yet has been able to function properly, because we still have about 100 miles of tributary levee that has not been brought grade.

No. 3 shows the Mississippi River levee from the Commerce Hills down to New Madrid, Mo.

No. 4 is a chain of 215 miles of levees of which 57 miles are in Missouri and are joined to our 158 in Arkansas to make a complete chain down to the mouth of the river.

No. 5 will show you some completed levees in heavy lines on the east side of that number and the unfinished levees on the west side.

No. 6 shows those red lines which represent 70 miles of levee we propose to construct to protect our backwater area, which is shaded in black and pointing to No. 7.

No. 8 is a blue-colored area in Missouri. The Missouri line is the brown line in the form of a Z. This area was flooded in 1945 and gave that area a flood damage of $26 million in that one flood. We only got about $10 million in Arkansas, but it would not take very many of those to pay for a lot of our work that would protect all of that area.

No. 9 is a green line at the lower end of the map. I would like to refer you at this time to a clipping I have attached there which shows the canal where this green line represents 14 miles of a cutoff we have just completed. This picture was taken and published last Tuesday in the Memphis Press Scimitar, and shows a dredge about to come down as far as this little cross on the bottom. That has been completed by this time. In fact, it was finished up last Friday. I thought this would show you this ditch which is about 400 feet wide on the average, and the average cut is about 35½ feet. It runs from 40 feet down to thirty-

something. It is the first feature of this project we are trying to construct to give us relief from such floods as the Missouri has, and we have had very little done except in this one part of this project to alleviate this condition. An 11-inch rain caused that, and they could have that at any time.

Gentlemen, No. 10 shows a little line in green which we propose to let in the next few days. That is 4½ miles of a cutoff there. Along with it is another small channel up above about a mile and a half which will shorten the river from 90 to 60 miles from the riverfront, which is shown as No. 11.

We have two very bad bottlenecks in this whole valley. One is at the State line, which affects very adversely the drainage condition in Missouri. You notice those people spent a lot of money in digging those ditches. In fact, they dug 3,600 miles of ditches in Missouri, besides those dug by the farmer. We have 2,400 on our picture on this map, which makes 6,000 miles of ditches to feed into the river channel, and the channel deteriorated and is in such a condition that we need this particular work to shorten it and to make it a better channel for the discharge of that water.

Mr. DAVIS. How wide and how deep will that connection be to shorten the river, that is, the St. Francis, which is your No. 10?

Mr. HUXTABLE. Well, that No. 10 is a similar one to the one you see in this picture. It is a 180-foot bottom ditch practically 400 feet wide on the top, which would be a new channel for the river. We will dam off part of this river and by other channels which are not shown on here we will take care of all that drainage which will be east of the levee system we have and take care of the backwater area. This area in black represents 768,000 acres of land flooded in the flood of 1937. About 600,000 acres was flooded by the flood backing around in behind the levee, and of course it congrested this thing at the north end and flooded another 168,000 acres.

These levees we will have in there along with the pumping station will protect all of that area. When we have floods like 1927 and 1937, the water gets about 10 feet deep in most of that area, and windstorms always come along at floodtime and destroy a lot of these houses and churches and schools and people. We just lose a tremendous amount of real property, with improvements on the land, during the time of these floods.

These floods have not come too regularly, but we have some that are big enough to do a tremendous amount of damage even when they do not get that high.

I want to cut this short, but I will tell you just one thing about the costs that have occurred in our valley. I will give you the cost in Arkansas, which is shown on the last page there. At the present time our Mississippi River levees in Arkansas come to a total of $51 million. Of that amount our district has paid $26 million by direct tax over the 63 years we have been in operation. The Federal Government has paid $25 million, or $1 million less than we have.

As to the tributary levees in Arkansas, the local people paid on those $12,500,000 for that construction. Since that time the Federal Government has paid $8,600,000. Also we have built almost 2,400 miles of ditches and have spent for its construction $28 million.

So today we have paid practically $66,500,000 under direct taxes, as against $33,600,000 that the Federal Government spent, which means we have practically spent about $2 for every $1 that the Federal Government has spent up to this time.

What I came up here to ask you to do is to back up what the general said yesterday in asking that this committee authorize an additional expenditure in money. The project has been authorized by the 80th Congress in its first session. At that time the Congress set up only $20 million for expenditure on this project as the general explained to you yesterday. We are getting past the middle of that appropriation of money, and now we ask that you authorize the balance of the money, which is $35,674,000.

Mr. Chairman, I believe that is all I have to say. I would like to talk to you for about another hour, but I think and I know we can depend on you all.

Mr. DAVIS. That is a good statement and you have done it quicker than any time I have ever seen you testify. If there are no questions at this point, the prepared statement submitted by Mr. Huxtable will be made a part of the record, without objection.

(The statement referred to is as follows:)

STATEMENT OF W. G. HUXTABLE, WEST MEMPHIS, ARK.

Mr. Chairman and members of the committee, I am W. G. Huxtable, chief engineer, St. Francis Levee District of Arkansas, West Memphis, Ark.

My levee district is responsible for 158 miles of main levee on the west bank of the Mississippi River. It is also the sponsor of that portion of the St. Francis Basin project that is located south of the Poinsett-Cross County line.

The St. Francis River is 475 miles in length. The basin is 215 miles long, 53 miles wide at the widest point, and has an area of 8,400 square miles.

GENERAL CONDITION OF THE BASIN

The attached map shows:

(1) The headwater diversion channel, west of Cape Girardeau.

(2) Wappapello Reservoir.

(3) The Mississippi River levee from Commerce Hills to New Madrid, Mo.

(4) The Mississippi River levee from the high land at New Madrid to the mouth of the St. Francis River (57 miles in Missouri and 158 miles in Arkansas to form a continuous chain of levee 215 miles in length.)

(5) Levees on the St. Francis and Little River in Missouri and Arkansas.

(6) The proposed levees (in red) below the Poinsett-Cross County line.

(7) The backwater area (in black).

(8) The area flooded in Missouri in 1945 (in blue).

(9) The 14 mile cutoff nearing completion, Madison to Marianna (in green).

(10) The 4.5 mile cutoff at Clark's Corner which is to be placed under contract this year (in green).

The Missouri-Arkansas line is the Z-shaped line in brown.

THE BACKWATER AREA

The area shaded black is the area flooded in 1937, it covers 768,000 acres. Water from the Mississippi River backing into the basin around the lower end of the levee covered approximately 600,000 acres. This caused the headwater to cover the remaining area. Seventy miles of levees, in red, when constructed will protect this area.

During the major floods water stands 10 feet or more in depth over most of the area. Waves from windstorms batter houses, barns, schoolhouses, and churches to pieces. Families must leave their homes and take their livestock and belongings to higher land. Traffic on highways and railroads is stopped. A flood late in the growing season, like 1927, causes loss of a crop.

THE FLOOD OF 1945

Wappapello Reservoir was completed in 1941. Its purpose is to help to regulate the quick runoff from the Ozark hills. The heavy rainfall in the first half of June 1945 (up to 11 inches in this section) caused the reservoir to be overtaxed and the flood poured over the dam. The large area in blue was inundated causing damage to crops and property valued at $26 million. Part of this damage was caused by a drainage bottleneck at the State line. The damage in Arkansas was estimated to be less than half the damage in Missouri. But a bottleneck at Riverfront (11) caused most of that damage. All this damage came from rainfall in the St. Francis Basin. No water was added by the Mississippi River. A similar flood today would cause as much damage as in 1945, because our progress has been so slow in constructing the works that will give us relief. The average annual loss in the basin due to floods is about $7 million.

DRAINAGE

Drainage districts in Missouri and Arkansas have constructed 6,000 miles of ditches (3,600 in Missouri and 2,400 in Arkansas) to drain the swampland of the two States. These ditches, together with the farm ditches, have overtaxed the channel of the St. Francis River. The cutoffs being constructed will shorten the river 30 miles (from 90 to 60) below Riverfront (11) and the flood height will be lowered 4.5 feet at riverfront.

COSTS IN ARKANSAS

The Mississippi River levee has cost $51 million to date. The local taxpayers have paid $26 million of this by direct tax.

2,400 miles of ditches have cost $28 million, and the tributary levees have cost $21 million, of which the local interests paid $12,500,000.

LOCAL TAXPAYERS SPENT

Mississippi River levees	$26,000,000
St. Francis and tributary levees	12,500,000
2,400 miles of ditches	28,000,000
Total	66,500,000

THE FEDERAL GOVERNMENT HAS SPENT

Mississippi River levees	$25,000,000
St. Francis and tributary levees	8,600,000
Total	33,600,000

The cost in Arkansas is about $100 million, Missouri has spent a similar amount. The ratio of cost in each State is about the same, which is 2 to 1.

AUTHORIZATIONS FOR THE ST. FRANCIS BASIN PROJECT

After passage of the Tributary Act in 1936 several authorizations were made for work in this basin above the Poinsett-Cross County line in Missouri and Arkansas.

The 81st Congress at its 1st session adopted House Document 132, and authorized the construction of the work as outlined by this document, in Missouri and Arkansas. The estimate of cost, as of February 1947, was $51,100,000. Recent estimates show that at present prices the cost would be increased to $55,674,000.

The same Congress authorized the expenditure of $20 million in H. R. 5472 on May 17, 1950, for this work.

We ask this committee to recommend authorization for the balance of the money necessary to complete the work, which is $35,674,000.

Mr. DAVIS. I pause very briefly to say I am sure these young ladies and gentlemen present are from Congressman Gathings' district; are they not?

Mr. GATHINGS. Right.

Mr. DAVIS. Well, it is coincidental and it is a fine thing that you young people should walk in on us while we are in committee and at work. Congressman Gathings is very much interested in the river project which we will discuss in just a moment or two. I am sure all of you recognize Mr. Huxtable, your engineer of long and distinguished standing. We are very proud of Congressman Gathings up here. He is my neighbor, of course, and I know of no man who is held in higher esteem. He is a member of the Agriculture Committee, and a high-ranking member. We are glad to have him sitting with us this morning until he himself goes down to testify in support of a project.

Mr. DONDERO. Mr. Chairman, would you permit a young Republican to endorse everything you have said about him?

Mr. DAVIS. Thank you, and I hope you go home and tell your Citizens for Eisenhower Republicans—and we have a lot of them down there—that Mr. Dondero had a nice word to say about our Congressman, Mr. Gathings. Mr. Dondero himself has been a longtime Member of Congress and he is voluntarily retiring this year. We are certainly going to miss him because he has been a fine influence on this committee.

We pass next to Mr. Earl Schultz, of Cape Girardeau, who is going to testify briefly in support of the St. Francis River Basin, presented by General Hardin on yesterday.

STATEMENT OF EARL R. SCHULTZ, CHIEF ENGINEER OF THE LITTLE RIVER DRAINAGE DISTRICT, CAPE GIRARDEAU, MO.

Mr. SCHULTZ. I am Earl R. Schultz, chief engineer of the Little River Drainage District, Cape Girardeau, Mo. I represent the drainage and levee districts in the southern portion of the State of Missouri on behalf of the Mississippi Valley Flood Control Association.

We appreciate the statement that you have made and I want to say in support of General Hardin and Mr. Huxtable that we concur with everything that they have said. For instance, in Missouri we spent over $100 million for flood control and drainage which we cannot get the full benefit of until the St. Francis project is completed.

Thank you.

Mr. DAVIS. Thank you.

The statement which you have submitted will be made a part of the record at this point, without objection.

(The statement referred to is as follows:)

STATEMENT OF EARL R. SCHULTZ, CAPE GIRARDEAU, MO.

Mr. Chairman, and members of the committee, I am Earl R. Schultz, chief engineer, the Little River Drainage District, Cape Girardeau, Mo.

I represent the drainage and levee districts in the southern portion of the State of Missouri on behalf of the Mississippi Valley Flood Control Association.

The Little River Drainage District is responsible for 20 miles of main levee which protects an area in southeast Missouri and northeast Arkansas, larger than the State of Connecticut, from overflow from the floodwaters of the Mississippi River.

The lower St. Francis Basin project in Missouri and Arkansas.

The drainage and levee districts in southeast Missouri have constructed approximately 3,600 miles of ditches and approximately 1,000 miles of levee which

have cost approximately $100 million for construction, right-of-way, maintenance, enlarging, strengthening, and relocating levees and administration. The Little River Drainage District has approximately 1,200 miles of ditches and levees which it constructed and must maintain. This district has approximately 500,000 acres within its boundaries and furnishes outlet drainage for an additional 700,000 acres for which it receives no financial aid.

The outlet for most of the drainage in southeast Missouri is through Big Lake, Ark., and thence to the St. Francis River and finally to the Mississippi River near Helena, Ark. This outlet is inadequate for drainage and flood control under existing condition.

The plan for correcting this condition is set out in House Document No. 132, 81st Congress, 1st session. Under this plan the area in southeast Missouri is sponsored by the extreme southeastern part of the State.

Under present conditions lands in Missouri as far north as Missouri State Highway No. 84, over 16 miles north of the Missouri-Arkansas State line, are seriously overflowed due to lack of sufficient outlet through Arkansas. The overflow conditions extend many miles farther north as it is impossible to give adequate drainage to the lands due to the lack of sufficient outlet. Neither Missouri nor Arkansas can improve the outlet, because of the magnitude of work necessary to help both States.

Conditions are getting much worse each year due to the fact that improvements in farm drainage must be done to attempt to get the surface water off of the agricultural lands as quickly as possible. In 1951 and 1952 more than 35 draglines were employed to construct farm ditches; much more of this work has been done since. Due to insufficient outlet for the main ditches, it is impossible to enlarge the ditches sufficiently to take care of this water and consequently the hazard of overflow has been increased.

Page 14 of House Document No. 132 shows the average annual crop loss to be $2,260,000 in Missouri or about $13.30 per acre. This should be increased about 25 percent to meet the present-day prices. The area in southeast Missouri dependent upon a better outlet for drainage had a flood damage in 1945 of about $26 million and no better outlet has been provided since. Such losses are reflected in Federal and State income-tax payments.

The soil in this section of Missouri is as rich and productive as any in the world and if given sufficient protection from overflow and adequate drainage will produce far above the average in food and clothing for the country.

The revised estimate for the work outlined in House Document No. 132, 81st Congress, 1st session, is $55,674,000 and authorization to expend $20 million on this project has been made. However, the Corps of Engineers state they have no authority to spend any of this money off the main stem.

The work on this project has progressed to such an extent now that it is desirable to authorize the full amount necessary to complete this project—about $35,674,000—and that work be done in southeast Missouri as soon as possible.

No Federal funds have been spent in southeast Missouri for drainage and this is just as important as building levees for flood protection.

Mr. DAVIS. I would like for the record also to show that our colleague, Congressman Paul Jones, was here yesterday and waited all morning to testify, but he instructed me to say that he endorsed everything you have to say, representing that basin area.

WHITE RIVER BACKWATER

Mr. DAVIS. Now I think we come to the longer one this morning, which is the White River backwater.

We will be pleased to hear from Judge J. Graham Burke of Helena, Ark., who has been identified and associated with the affairs of the lower Mississippi for many, many years. He has held various offices of trust and responsibility and he always makes a splendid statement. So, Judge, just sit down there and take your time and bring us up to date on this.

STATEMENT OF J. G. BURKE, HELENA, ARK., ATTORNEY FOR THE WHITE RIVER DRAINAGE DISTRICT OF PHILLIPS AND DESHA COUNTIES, ARK.

Mr. BURKE. Mr. Chairman, before I make many remarks about the project I want to say on behalf of my levee board and probably all of the levee boards in the valley that we were sorry this morning to learn that our good friend, Mr. Dondero, has decided to retire from public life. I do not know of any better friend that the valley has ever had than Mr. Dondero. He has been a faithful and loyal supporter of our projects.

I want to say to you, Mr. Dondero, we regret your retirement and ask God's blessing on you from now on to eternity.

Mr. DONDERO. You are very kind. Thank you.

Mr. BURKE. Another thing I would like to say is that I want to compliment General Hardin, president of the Mississippi River Commission, for the splendid statement that he made yesterday in explaining and justifying the projects that have been offered to this committee.

Mr. Chairman, I am attorney for the White River Backwater Levee District in Phillips and Desha Counties and Monroe County, Ark.

The commissioners of our district are here this morning, and the engineer of the district, as well as myself, to support the terms and provisions of H. R. 10904, which was introduced by Congressman Gathings on April 30, 1956.

The need for a pumping plant in my area is uncontroverted. It has the approval of the district engineer, the Mississippi River Commission, the Chief of Engineers, the Soil Conservation Service of the Department of Agriculture, and also the United States Department of Forestry. The only impediment that has been offered to this project has stemmed from the United States Fish and Wildlife Service.

I want to say in behalf of my commissioners that we have done everything possible to meet the requirements of this organization. They requested a water elevation in the backwater area that would have seriously damaged our drainage program. We finally compromised that agreement by reaching a water elevation of 146, but that was not all.

If you will turn to page 7 of my statement, copies of which I am sure you all have, you will see that in section 2, paragraph d, on Page 20 of the Fish and Wildlife Service report, which is appendix III to the report of the Corps of Engineers, it reads as folows:

> Project initiation be contingent on local interest furnishing, without cost to the United States, all easements required for project operation, * * *

We have no objection to that. That is part of our obligation which we are willing to assume. But the next clause reads:

> * * * with specific provision that the White River Drainage District convey to the United States of America the 3,994.07 acres presently leased to the Fish and Wildlife Service.

They have had supervision and control of this 4,000 acres of land for the past 18 years. They have done nothing that I know of or

that my commissioners know of to improve those lands for the preservation of fish and wildlife in that particular area. By reason of the fact that we had turned over the supervision and control of these lands the district lost in revenue aproximately $36,000 which would have been collected in taxes.

When we had these conferences with the Fish and Wildlife Service out of the regional office in Atlanta, we were informed that a directive had been issued out of Washington by the Director of the Fish and Wildlife Service that no permit would be issued unless this district conveyed in fee the 3,994.07 acres of land. We told them we could not do it; that it was illegal and that it was unlawful.

Rather than to risk my own judgment as to the law, I took the matter up with the Attorney General of the State, and he wrote an opinion in which he set forth that it was not only unlawful, but would be illegal for the district to give away the assets of this district. That opinion was supported by the Supreme Court decisions of the State of Arkansas, which has universally held in a long line of decisions that the commissioners of an improvement district are trustees for their taxpayers and landowners, and that they have no legal or lawful right to convey those lands without consideration; that it would be dissipating the assets of the district, which would be prohibited under the law.

We told them that we could not meet that requirement, but we were willing to turn over the exclusive jurisdiction, control and supervision of all these lands for the Fish and Wildlife Service. They said, "We cannot negotiate with you any further because this directive has come out of the Washington office and it will be required before you can construct this pumping plant, to give us this 4,000 acres of land."

I say that this was an unlawful and an exhorbitant demand to be made of us. In other words, they take the position that under Public Law 732, the Coordination Act, that they have the right to reject, and they have the right to veto any flood control project. I do not believe this Congress or any other Congress will stand for such tactics as that.

The Corps of Engineers have served us well and faithfully over a period of many, many years. They are efficient; they are competent; they are the best-trained engineers that we have in the country today.

Mr. DAVIS. Just let me interrupt you for a moment. It looks like the Fish and Wildlife Service is holding a gun against your head on this improvement.

Mr. BURKE. Yes, sir.

Mr. DAVIS. What wildlife would be protected in these 4,000 acres of land? What sort of wildlife would be protected in the 4,000 acres they want you to deed and which you say would be illegal to deed?

Mr. BURKE. Well, principally swamp rabbits, mink, opossum, raccoons and some deer and turkey. They say that is far more important than agriculture.

Mr. DAVIS. Mink, opossum and coons?

Mr. BURKE. They further set forth in their report that agriculture is incompatible with that of wildlife. Now they take a position of that kind and you can see where we are stymied. This Congress can approve this project and can authorize the money to be appropriated for it, but they say that you have to build this pumping plant on lands that belong to the United States, and we will not give you a permit to do so unless you give us this 4,000 acres of land.

I do not believe Congress will stand for that.

The Fish and Wildlife Service have 116,000 acres of land that are adjoining and adjacent to this project. Of the 116,000 acres of land belonging to the United States under the Migratory Refuge Act, only 4,400 acres of land are situated within the confines of this district. We have submitted in this bill and have an agreement with the Arkansas Game and Fish Commission that the 4,400 acres of land which belongs to the United States Fish and Wildlife Service, or to the United States, I should have said, should be conveyed in fee to the Arkansas Fish and Game Commission, who will develop the land for recreational purposes.

I do not know of a dime that has been spent by the Fish and Wildlife Service to develop these lands.

Mr. Chairman, I think this is an unreasonable demand, on the part of the Fish and Wildlife Service. It is a rank case of, in my opinion, extortion, the same as if I would go into a bank and put a pistol on the teller and tell him to hand over the money which I want. That is the position they have taken in this. The only recourse that we have is to come to the Congress of the United States to settle this difference.

If section 2 is removed from this bill then the project can never be constructed, even though it has a high priority and a high benefit-cost ratio, as testified to by General Hardin yesterday.

Now, Mr. Chairman, in conclusion I do not think it is unreasonable for us to come before this committee and set forth the position that has been taken by the United States Fish and Wildlife Service. In other words, they take the position that swamp rabbits, opossums, and coons are far more important than agriculture.

The agricultural industry of this Nation is the backbone of the Nation—not raccoons, opossums, and swamp rabbits. I do not know of any man who is making a living out of that. I do not know of any money that goes into the banks of this country from that. I do not know of any taxes that are paid to the United States Government on account of the wild animals.

Mr. Chairman, with all due deference, I would like to say I am a sportsman and I like to hunt, and I like to fish, and some of their projects I am for, but I do not think it is right for them to stand up and demand that we violate the laws of Arkansas by giving them 4,000 acres of land.

Mr. Chairman, I wish to thank you for this privilege of coming before you and explaining section 2 of this bill, and what we are trying to accomplish.

Mr. DAVIS. Thank you very much, Judge.

Off the record.

(Discussion off the record.)

Mr. DAVIS. May I ask if any representative of the Fish and Wildlife Service is here?

(No response.)

Mr. DAVIS. The Fish and Wildlife Service District down in Miami required that there be conveyed to them in fee simple more than 3,000 acres of land, or almost 4,000 acres of land, before they will give their approval to this project which will require a pumping station. Is that correct?

Mr. BECKER. I would like to raise a point, Mr. Chairman. I wonder if he knows the answer as to why the Wildlife Service wishes to circumvent the desires of Congress and is demanding additional acreage for wildlife preservation. Just as a suggestion, why could we not get somebody down here or have our counsel go into that law and see where they have that right. Maybe some members of the committee who have been here for a longer time than I have know the answer, but I do not know it. I think they have these thousands of acres which are adjoining this area and as the judge said, they take it out of economic circulation. This means 4,000 more acres that would go out of circulation. Are these next to it?

Mr. BURKE. Mr. Becker, this area in green represents 116,000 acres of land which adjoin this district and that belongs to the——

Mr. BECKER. That is all owned by the Government?

Mr. BURKE. Yes.

Mr. BECKER. And now they want 4,000 more acres?

Mr. BURKE. They want us to give them 4,000 here. They own this little strip in fee here, which we say should be turned over to the Arkansas Game and Fish Commission because it can then be administered on a State level instead of the Washington level.

Mr. BECKER. I am for that.

Mr. BURKE. In other words, when these directives come out of Washington, if you take Mr. Walter Gresh, who is a very fine and splendid gentleman, we could deal with him and the local representatives, but they say, "We have a directive. You are not going to have to pay to convey this 4,000 acres of land, but all other lands that the district may acquire."

Mr. JONES. Who is making those representations?

Mr. BURKE. I think his name is Suomela.

Mr. GRAY. Of Fish and Wildlife Service of the Department of the Interior?

Mr. BURKE. Yes. He may be the assistant director.

Mr. GRAY. Mr. John L. Farley is director.

Mr. ROGERS. What will this land be used for if you do not convey title?

Mr. BURKE. We will use it for the growth of timber. It is in what is known as the sump area.

Mr. ROGERS. Will it be used by the district to grow timber?

Mr. BURKE. Yes. The district will own it and have supervision over it.

Mr. ROGERS. Do you lease it out?

Mr. BURKE. Yes. It is leased to the United States Fish and Wildlife Service now.

Mr. ROGERS. But I am thinking if you grow timber there would you lease it out to private individuals, or how would it be handled by the district?

Mr. BURKE. No. We would lease to the different timber companies, and what we want to start is a reforestation program on the 4,000 acres of land which we think would be very beneficial to the district.

Mr. DAVIS. From the standpoint of flood control?

Mr. BURKE. Absolutely.

Mr. ROGERS. Will there by any agricultural crops?

Mr. BURKE. No, sir. Not on this land. It is known as the sump area.

Mr. ROGERS. Are there any feeding areas that you feel are necessary for the game in that area?

Mr. BURKE. Yes. You have these canals running in there, and that is where your impounded waters are that General Hardin mentioned yesterday.

Mr. DAVIS. I think he wants to know if you have any feeding areas for the game.

Mr. BURKE. Yes.

Mr. ROGERS. That they feel is necessary to be a part of the other area which the Government owns?

Mr. BURKE. Yes.

Mr. ROGERS. They feel this is a necessary part in conjunction with the other lands?

Mr. SMITH. Will the gentleman yield?

Mr. ROGERS. Yes.

Mr. SMITH. Is it not more likely that they want to see how they can get additional acreage?

Mr. BURKE. Yes. Absolutely.

Mr. SMITH. On that same point it is my understanding this land which you operated as a timber preserve or intend to, will still be able to be used by game even though it will be used for timber growing.

Mr. BURKE. What was that?

Mr. SMITH. You plan to make it a timber operation?

Mr. BURKE. Yes.

Mr. SMITH. And it will still be an area which will be a natural habitat for game.

Mr. BURKE. Just like it is today.

Mr. BALDWIN. I feel very sympathetic to the argument presented on the 4,000 acres, but at the same time, it seems to me we should either ask the Fish and Wildlife Service to give us a written letter telling us why this has come about, or send somebody up here at the next hearing, so we can at least get an idea of what the reason is for this proposal.

Mr. DAVIS. I would like to hear it as a matter of interest. I do not think it will take long, but I think the committee is pretty firmly convinced, as Mr. Baldwin or Mr. Becker stated, that to add 4,000 acres to 116,000 acres would serve no purpose, and as Mr. Smith indicated it would not disturb the natural habitat of the game. These opossum can live among these trees just as well.

Mr. BECKER. I agree with that. I always dislike it when I find some Bureau of the Government circumventing the law enacted by Congress. When we have enacted laws for flood control and otherwise I dislike intensely and would want to fight any bureau that tries to circumvent it and hold up something like this, to prevent their going ahead with flood control and other projects.

I want to have it brought up here as to whether they have the right or if we gave them that right in the public law in 1938. I think our counsel ought to give us a little advice on the subject later on.

Mr. BURKE. May I make this statement, Mr. Becker: The Corps of Engineers under the Coordination Act is required to coordinate

their report along with the Fish and Wildlife Service, the Soil Conservation Service, the Forestry Service, and so on. It coordinates with the different governmental agencies. That is the reason why it has come up in this case that we are presenting here this morning.

Mr. SMITH. It is not a question of their having a right to do what they did, a legal right. They have under the law the authority. The plan was submitted by the Bureau of the Budget with this plan in it. It was approved through the various developments and only gained approval through the Corps of Engineers. The Bureau of the Budget, you know, is in the office of a certain gentleman.

Mr. BURKE. Right at this point I would like to read something in the official report, which has a lot of bearing on this case. This is the report of the Fish and Wildlife Service:

> Big game and upland game associated with forest habitat would be seriously affected by widespread clearing of wooded lands for agricultural use. It is estimated that 21,500 acres of forest would be eliminated with an attendant reduction in numbers of deer, turkeys, squirrels, swamp rabbits, opossums, raccoons, and minks.
>
> The present trend toward control of hunting rights would probably be intensified in further restricted hunting, etc. An increase in cleared land would afford few compensatory benefits since farming practices on most of these lands would limit production of food and cover for fur-bearing animals.

Mr. BECKER. How far does this project go to create this situation? In other words, how long has this been held up because of the Fish and Wildlife Service demanding that 3,994 acres before proceeding?

Mr. BURKE. It has been held up, I would say, around 7 years.

Mr. BECKER. So it is not a question right now of any Department holding this up?

Mr. BURKE. The first request made by the Bureau was that we buy up 10,000 acres of land, that is, that the district be required to take their money and buy 10,000 acres and give it to them.

Mr. BECKER. So it is a general policy of theirs that they hold on to something of this nature, whether it is today or yesterday. Why they want that particular 4,000 acres when they have 116,000 acres already there, I do not know. If it were 100 or 200 miles away I could understand it, but how far apart are they? Are they adjoining?

Mr. BURKE. It joins it.

Mr. BECKER. It is contiguous to the 116,000 acres?

Mr. BURKE. Yes. Right here is the 116,000.

Mr. BECKER. I do not understand it.

Mr. BURKE. They have just got a gun to my head and tell me I have got to do so-and-so.

Mr. BUSH. Are any sportsmen's organizations against this and protesting this?

Mr. BURKE. No, sir. No local interest is protesting it at all. The Arkansas Game and Fish Commission are heartily in favor of the passage of this bill as it is written.

Now, Mr. Chairman, before I conclude I would like to state that this area here has been in actual intensive cultivation for practically 100 years or more. Some of the first lands which were developed in Arkansas—in eastern Arkansas—were along the banks of the Mississippi River. This is not a virgin timber proposition. It was done for the protection of 80-some-odd-thousand acres of land which are in cultivation. The pumping plant will benefit some 41,000 acres of land

which are now interfered with because this water backs up into these canals and interferes with farm drainage.

Mr. DAVIS. It will get the water into the St. Francis so it will not stand for too long a period of time. That is right, is it not?

Mr. BURKE. That is right, sir.

Mr. DAVIS. Mr. Tucker, does not Mr. Gathings have a bill which has some language in it that would take care of it?

Mr. TUCKER. Yes, sir.

Mr. BURKE. Yes, sir. H. R. 10904. I have an extra copy here if you would like to have it. That is in section 2.

Mr. DAVIS. If the committee will permit me, Mr. Gathings had to go to his committee, which was meeting. Let me read section 2 of H. R. 10904 of Mr. Gathings' bill, which he and Judge Burke and others think will take care of this:

> The Secretary of the Interior shall, in order to carry out the purposes of the first section of this act, grant to the White River drainage district of Phillips and Desha Counties, Ark., such permits, rights-of-way, and easements over lands of the United States in the White River Migratory Refuge, as the Chief of Engineers may determine to be required for the construction, operation, and maintenance of the project referred to in the first section of this act. The Secretary of the Interior shall also convey as soon as practicable after the date of the enactment of this act without consideration therefor to the Arkansas Game and Fish Commission all lands of the United States which are situated in the portion of such drainage district which is located in such refuge.

That is the 3,994 acres.

Mr. BURKE. No, that is 4,400 acres shown here which now belongs to the United States.

Mr. DAVIS. I see.

Mr. BURKE. In other words, just to be perfectly frank, Mr. Chairman and members of the committee, we would like to get them out of our district entirely. They have interfered with practically everything we have proposed. As the little boy said, they will come in here all the time.

Mr. DAVIS. Would not the 4,400 acres include the 3,994?

Mr. BURKE. No, sir. The 3,994 acres is shown here.

Mr. DAVIS. And they want 4,400 in addition?

Mr. BURKE. Sir, they want all this land conveyed to them also, and they already own 116,000 acres.

Mr. BALDWIN. May I ask a question?

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. This 4,400 acres you are asking in this bill to be transferred to you does not have any direct bearing on this flood-control matter, does it? This is something else in addition to it. Is that right?

Mr. BURKE. Well, in other words, we cannot get a permit to build the pumping plant unless we can get this bill passed.

Mr. BALDWIN. As I understand it, you have stated in your testimony that you cannot get a permit because you have not been able to convey the 3,994 acres. Is that right?

Mr. BURKE. We have no legal right.

Mr. BALDWIN. But the provision in the bill which directs the Fish and Wildlife Service to convey a different amount of acreage, namely, 4,400 acres, is not directly related, as I understand it, to the issues of this case.

Mr. BURKE. That is correct.

Mr. BALDWIN. In other words, If we took some steps to knock out the Fish and Wildlife Service requirement for the 3,994 acres and passed the remainder of this bill, you could proceed to pass the flood-control project, even if we did not make any conveyance of the 4,400 acres.

Mr. BURKE. That is right.

Mr. BALDWIN. I am a little bit concerned about it because we seem to be going a little far afield on that aspect.

Mr. DAVIS. That is what prompted me on the 4,400. Why do you want the 4,400, Judge? Why do you need it if we relieve you of the 3,994-acre obligation?

Mr. BURKE. I will try to be as frank as I can be with the committee. What we want to do is get them out of our district entirely.

Mr. BALDWIN. Mr. Chairman, I would like to submit that aspect is not in the province of the Flood Control Subcommittee.

Mr. DAVIS. I do not think we have jurisdiction. I think we can take care of your problem, but we cannot go across the street.

Mr. BURKE. But without the passage of section 2, even if that is eliminated, you have still got to direct that this permit be issued to construct.

Mr. BALDWIN. I agree on that.

Mr. DAVIS. We agree on that.

All right. I think we have cleared it up. I think we would be going too far outside of our jurisdiction to bring that 4,400 acres in, but we will take care of the 3,994 acres. That should insure the project on the basis of the recommendations made by General Hardin yesterday.

Mr. BURKE. If they are going to have another hearing on this the members of my board would be glad to come back, but we have to travel an awfully long way and it is very expensive.

Mr. DAVIS. If we find it necessary for any one of you to come back, we will certainly notify you, but I do not think it is necessary. I think this committee expressed its feelings this morning that it will be necessary, but we would like to see what the Fish and Wildlife Service people will say. I am sure it will not be necessary, though, for you to come back.

Mr. BURKE. I see.

Mr. Chairman, I want to thank you and the members of the committee for the very attentive reception you have given me and the privilege of testifying before you.

Mr. DAVIS. Thank you very much.

That closes that project.

At this point, without objection, the statement of Mr. Burke will be made a part of the record.

(The statement referred to is as follows:)

STATEMENT OF J. G. BURKE, HELENA, ARK.

Mr. Chairman and members of the committee, my name is J. G. Burke, of Helena, Ark. I am the attorney for the White River drainage district of Phillips and Desha Counties, Ark., the sponsor of the White River backwater project in Arkansas.

The commissioners, engineer of the district, and I appear before your committee in support of H. R. 10904, which bill was introduced by Congressman E. C. Gathings on April 30, 1956. The bill authorizes the Corps of Engineers to con-

struct and operate, at Federal expense, a pumping plant to prevent flooding of lands from impounded waters during flood stages of the Mississippi and White Rivers.

The need of a pumping plant is undisputed and uncontroverted. The present project has been under study by the Corps of Engineers for several years. The reports made by the District Engineer, Corps of Engineers, Memphis, Tenn., Mississippi River Commission and Chief of Engineers, convincingly discloses that a pumpng plant is required to prevent flood damages to a large acreage of land within the district. These reports further show that the project is economically justified, having a benefit-to-cost ratio of 2.3 to 1. This cost ratio is one of the highest in the alluvial valley.

The protected area within the district comprises 145,500 acres of land in Phillips, Monroe and Desha Counties, Ark. The pumping plant, as designed and proposed by the Corps of Engineers, will protect from inundation of surface waters 68,700 acres of land which lie below 154.8 mean sea level, of which 23,500 acres are cleared and in a high state of cultivation. In addition thereto, the impounded waters interfere with adequate drainage of an adjacent 41,300 acres. The average annual flood damage on account of impounded waters is estimated to be $202,000. The area in question has a population of approximately 12,000. Of the total acreage in the protected area, there are 81,000 acres in a high state of cultivation. The principal crops consist of cotton, corn, soybeans, rice, and hay. These lands are some of the most fertile and productive in the valley.

The district has expended and allocated approximately three-quarters of a million dollars for interior drainage. The Federal Government has expended and will expend the sum of $8,400,000 for the construction of levees within the district. The full benefit of these expenditures cannot be realized without a pumping plant. The above statements, when considered along with the report of the Corps of Engineers, discloses, in our judgment, that the construction and operation of a pumping plant is not only necessary but imperative.

The White River district was organized under the general drainage laws in 1919. The plan, as approved by the commissioners and the court, called for the construction of levees, canals, and a pumping plant. Every survey, study, and report made by the Corps of Engineers and private engineering firms specified that a pumping plant would be necessary to take care of interior drainage when the floodgates are closed, due to flood stages in the Mississippi and White Rivers. Although the district was created in the year 1919, the actual construction of the project was held in abeyance for many years, awaiting the approval of Congress. The project was finally approved under the terms and provisions of the Flood Control Act of June 15, 1936 (sec. 5, P. L. 678, 74th Cong.), upon condition that the area in question would only receive partial protection, due to the fact it was situated within what is commonly called the "White River backwater area." In order to obtain the partial protection, the district was required to meet the following conditions:

(*a*) Provide rights-of-way for levees;

(*b*) Provide for interior drainage;

(*c*) Furnish an easement over and across the lands for an emergency reservoir;

(*d*) Maintain the levees after construction; and

(*e*) Protect and save harmless the Federal Government from any liability for damages by use of the area for reservoir purposes.

The district has performed and fulfilled all of the above conditions and requirements.

In considering the original project, it must be borne in mind that each and every landowner in the district was required to execute an easement in favor of the United States so that the area in question could be used as an emergency reservoir at any time within the discretion and judgment of the Chief of Engineers. The landowners were further required to relinquish all claims for damages which they would sustain by reason of the use of the land for reservoir purposes. This was a perpetual easement and one of the most comprehensive instruments that has been executed in the lower valley. This easement is a matter of record, having been recorded the same as a deed of conveyance. The landowners were required, by reason of this reservoir condition, to make a great sacrifice.

In order to carry into execution the aforementioned project for the construction of levees, and to furnish the right-of-way requirements, it became necessary to obtain a written permit from the Biological Survey of the Department of Agriculture (now United States Fish and Wildlife Service, Department of the

Interior). After many, many conferences with the officials of the Biological Survey, held in Washington, a permit was finally issued in favor of the district on May 19, 1938, granting the necessary rights-of-way for the construction of levees, borrow pits, canals, and other flood-control structures. In consideration for the issuance of the permit, the district was required to give to the United States Fish and Wildlife Service the exclusive managament and control of the lands owned by the district in the sump area for the protection and preservation of fish and wildlife.

Actual construction of the backwater levee system was commenced in August of 1938. The levee system is 40.8 miles in length. There are two large floodgates at Little Island Bayou and Deep Bayou, which are gravity-outlet structures for the evacuation of interior drainage. There are two fuse-plug sections in the levee system so that the area in question can be used as an emergency reservoir to insure the safety of downstream levees on both sides of the Mississippi River. Thus, it will be seen that the entire area under consideration is enclosed by levees, so that the interior drainage outlets are blocked when high-water stages occur in the Mississippi and White Rivers.

The present bill now before the committee calls for a modification of the original project so that a pumping plant shall be constructed and operated to prevent flood damages from impounded waters.

Section 2 of the present bill provides that the Secretary of the Interior shall, in order to carry out the proposed project, grant to the district such permits, rights-of-way, and easements over the lands of the United States in the White River Migratory Bird Refuge which may be required by the Chief of Engineers for the construction, operation, and maintenance of the project. Section 2 of the present bill is, in our opinion, an integral part of the project to be authorized, for the reason that the pumping plant to be constructed will be situated upon lands belonging to the United States, now under the supervision of the Department of the Interior. Up to the present time, the Department of the Interior, acting through the Director of the United States Fish and Wildlife Service, has refused to give and grant to the district a permit for the construction of the pumping plant unless the district will convey in fee to the United States 3,994.07 acres of land owned by the district, which has been acquired by purchase and foreclosure proceedings. The officials of the Fish and Wildlife Service take the position that the district will be required to obtain a new permit for the construction and operation of a pumping plant, and that such a permit will not be issued unless the district complies with its requirement. At this point we wish to call specific attention to section 2, paragraph (*d*), found on page 20 of the Fish and Wildlife Service report, which is appendix III to the report of the Corps of Engineers, which reads as follows:

"(*d*) Project initiation be contingent on local interest furnishing, without cost to the United States, all easements required for project operation, with specific provision that the White River Drainage District convey to the United States of America the 3,994.07 acres presently leased to the Fish and Wildlife Service."

The committee will observe from the above that the project now under consideration is contingent that the district be required to convey, without cost to the United States, the 3,994.07 acres of land owned by the district. In other words, even though the present project is approved by Congress, the same cannot be carried into execution as long as this requirement is in effect. On this particular requirement, the commissioners of the district, together with the Corps of Engineers, have had conferences with the officials of the Fish and Wildlife Service, at which times it was clearly and distinctly pointed out that the district had no legal power or authority to convey these lands without a valuable consideration. The position taken by the commissioners of the district is supported not only by the opinion of the attorney general of the State of Arkansas, but also by numerous decisions of the Supreme Court of Arkansas.

It must be borne in mind that under section 6 of the original permit issued by the Fish and Wildlife Service on May 19, 1938, the exclusive jurisdiction and control of these lands was given to the Department of the Interior by the district for the protection and preservation of fish and wildlife. The district has had many opportunities to sell and dispose of these lands, but has repeatedly refused to do so for the reason it would be a breach of the terms of the permit issued May 19, 1938. By reason of this provision in the permit, the district has lost approximately $36,000 in tax revenues which would have been collected.

In behalf of the commissioners of the district, I wish to state, most emphatically, that the commissioners, who are not only landowners but good businessmen, have made every effort possible to meet the requirements of the United States Fish and Wildlife Service. In order to compromise the respective differences, the commissioners of the district have agreed to water elevations which will be hazardous to good drainage. In order to compromise the differences between the commissioners and the Department of the Interior, a letter was written to Walter A. Gresh, regional director, United States Fish and Wildlife Service, Atlanta, Ga., dated March 16, 1956, whereby the district agreed to enter into an agreement giving exclusive control and supervision of these lands for the protection of fish and wildlife, in accordance with paragraph 6 of the original permit issued on May 19, 1938. The only control of these lands which would not be relinquished by this agreement was the right to cut and remove the merchantable timber growing and to be grown upon the lands. The district further agreed that the timber would be cut on a selective cutting basis to be agreed upon between the forester representing the district and the forester representing the Department, and if the two foresters were unable to agree, then they would have the right to call in a disinterested forester to settle the dispute. The officials of the United States Fish and Wildlife Service rejected the above proposal and continue to demand that the lands must be conveyed in fee simple, without consideration, to the United States. Such a demand, in our opinion, is unjust, unreasonable, and inequitable, as well as illegal and unlawful. These lands constitute a valuable asset to the district for future growth of timber thereon. The commissioners, according to the decisions of the Supreme Court of Arkansas, are trustees for the taxpayers and landowners of the district; they have no legal right to give away or dissipate the assets of the district. Furthermore, the United States the largest landowner of this country. A recent article disclosed that 21 percent of the landed area of the United States is in the Federal Government. The United States owns, adjacent to this district, 116,000 acres of land. Why should the district be required to give and grant to the United States an additional 4,000 acres of land? In our opinion, the requirement for conveyance of the fee to the lands owned by the district is a rank case of extortion.

As a matter of fact, we see no necessity for the issuance of an additional permit by the Department of the Interior. The pumping plant facilities will be located upon lands which the Department has already dedicated and granted to the district for the construction of levees, levee foundations, canals, borrow pits, and other flood control structures. The pumping plant was an integral part of all the plans that have been designed for the district. Most assuredly no one would contend, as the Fish and Wildlife Service does now, that the construction of a pumping plant is not a flood control structure. Section 2 was made an integral part of the bill for the reason the Department of Interior insists that an additional permit must be issued for the construction of the pumping plant. If section 2 is omitted from the bill, the Department of the Interior will be the final judge of whether or not this project can be constructed.

To further show the unreasonable and illogical arguments that have been used by the officials of the United States Fish and Wildlife Service, we wish to call to the attention of the committee that they estimate fish and wildlife will suffer a damage of $91,000 annually. When asked to explain these damages, the only answer that could be elicited was that it was figured according to a formula. Just what that formula is, no one knows. The officials of the Department of the Interior also take the position that the operation of a pumping plant will be extremely detrimental to the fish and wildlife habitat. For instance, paragraph 38, page 16, of the Fish and Wildlife Service report states:

"38. To safeguard project values ascribed to flood control, fish, and wildlife, all lands within the sump of the backwater area should be perpetually dedicated to these purposes. To encourage further encroachment of agriculture into the sump would not only decrease wildlife habitat but create additional flood control hazards and defeat the original purpose of the White River backwater levee. Moreover, a continuous conflict between agriculture and fish, wildlife, and flood control would be attended by increasing problems of administration."

Another objection offered by the Department of the Interior can be found at page 10, paragraph 26, of its report, which reads as follows:

"26. Big game and upland game associated with forest habitat would be seriously affected by widespread clearing of wooded lands for agricultural use. It is estimated that 21,500 acres of forest would be eliminated with an attendant

reduction in numbers of deer, turkeys, squirrels, swamp rabbits, opossums, raccoons, and minks."

The above is quoted expressly for the purpose of showing the absurdity of the argument advanced by the Fish and Wildlife Service. It will be observed that it is their principal contention that agriculture is inconsistent and incompatible to the preservation of wildlife. The lands that will be protected by the operation of a pumping plant are privately owned, and most assuredly the owners of these lands should be given an opportunity to make them productive. It is a well-known fact that agriculture is the predominant enterprise of this Nation. The welfare of the people of this area is far more important than the preservation of opossums, raccoons, and minks.

The last clause of the bill will require the Secretary of the Interior to convey to the Arkansas Game and Fish Commission all lands of the United States which are situated within the drainage district. As previously stated, the United States is the owner of land east and west of White River, adjoining and adjacent to the district. Of this 116,000 acres only approximately 4,400 acres of land are located within the boundaries of the White River district. The representatives of the United States Fish and Wildlife Service have complained and contend that the building of the White River levee separated its properties and materially interfered with the proper administration of the migratory refuge. This being true, we feel that the 4,400 acres within the boundaries of the district should be conveyed to the Arkansas Game and Fish Commission, subject, however, to the right-of-way granted to the district under the permit issued May 19, 1938. If this is done, then the commissioners of the district have agreed with the Arkansas Game and Fish Commission to give them the supervision of the 3,994.07 acres of district land for the preservation of fish and wildlife. We further feel that the properties can be better administered by the Arkansas Game and Fish Commission, and that these lands can be made into one of the finest recreation centers in Arkansas. We further contend that it is to the best interest of all parties concerned that these properties be administered on a State instead of a Washington level. The Arkansas Game and Fish Commission have the funds to develop and improve these lands for recreational purposes. Up to the present time the United States Fish and Wildlife Service has done nothing to improve these lands for recreational use. The Arkansas Game and Fish Commission have expressly stated that they would welcome the opportunity to administer and improve the lands in question, and are heartily in favor of the passage of this bill. The conveyance of this property to the Arkansas Game and Fish Commission is in accord with the report made by the United States Fish and Wildlife Service. At paragraph 39, page 16, of the report they state:

"39. Thus, it would be desirable if all lands within the sump were acquired and placed under the jurisdiction of the Fish and Wildlife Service or the Arkansas Game and Fish Commission."

Before closing this statement, we deem it advisable to state to this committee that under the Coordination Act, Public Law 732, the United States Fish and Wildlife Service representatives take the position that Congress has given them blanket authority to oppose all flood-control projects in the lower Mississippi Valley. In other words, the position taken by the Fish and Wildlife Service is that they have the right to veto and reject any plan for flood control submitted by the Corps of Engineers. The Corps of Engineers is composed of some of the best engineering talent of this country. They have been in charge of flood control for many, many years; they are efficient—they are competent—and they have rendered a splendid service to the welfare and prosperity of this Nation. No one would doubt for a moment that they are better qualified to pass upon flood-control projects than the United States Fish and Wildlife Service. We do not believe that the Congress of the United States will ever give and grant to the United States Fish and Wildlife Service the right to dictate to the Corps of Engineers what project or projects meet with their approval. We regret to state that in the consideration of this bill a principle is involved, which should be definitely settled by Congress as to whether the Corps of Engineers or the United States Fish and Wildlife Service have the power and authority to pass upon flood-control matters.

In conclusion, we wish to state that the project authorized by this bill is of great importance to the people of this area. The project is economically justified, having a very high benefit-to-cost ratio. This project has the approval of the district engineer, Corps of Engineers, the Mississippi River Commission, Chief of Engineers, the United States Soil Conservation Service, and the United

States Forestry Service; the only objection that has been offered to the project stems from the representatives of the United States Fish and Wildlife Service. The production of farm products is, in our opinion, far more important to the welfare of this Nation than opossums, raccoons and minks.

Old and Atchafalaya Rivers and Navigation Lock

Mr. Davis. We have brother Chester Thompson here, a former colleague of ours in other years, and we want to hear from you now, Chester.

STATEMENT OF CHESTER C. THOMPSON, PRESIDENT OF THE AMERICAN WATERWAYS OPERATORS, INC., WASHINGTON, D. C.

Mr. Thompson. Thank you, Mr. Chairman.

I want to file a short statement, Mr. Chairman and members of the committee, with respect to the recommended lock size in the Old River control works.

Yesterday General Hardin for the first time stated that the size of the lock determined upon would be 1,200 feet long and 75 feet wide and 13 feet over the miter sills. The navigation interests who will use that facility and are now using the Old and Atchafalaya Rivers now feel that lock is too small.

Mr. Rogers. Where is that lock located?

Mr. Thompson. In the Old River control it goes below Baton Rouge.

Mr. Rogers. Will you indicate it for us, please, on the map?

Mr. Thompson. Here.

Mr. Davis. You mean you are objecting to the recommendation of the Army engineers which was made after long study?

Mr. Thompson. Yes, sir.

Mr. Davis. How long will it take you to present your facts?

Mr. Thompson. I filed a statement, Mr. Chairman, but I just want to point out for the consideration of the committee that the Corps of Engineers and Congress determined on a standard lock size on the Ohio and Mississippi Rivers of 1,200 by 110 feet. We regard the Old River route as just a shortcut of the Gulf Intracoastal Waterway, as a part of the Mississippi River system. We feel that a 75-foot lock would constitute a bottleneck in that system when all of the other locks are 110 feet. Operators using that waterway and who will use it more extensively after it is completed feel that the lock should be 110 feet and it should be a standard size and width lock.

Mr. Rogers. That is not on the main Mississippi River channel, is it?

Mr. Thompson. It is right out of it, Mr. Rogers. It is a shortcut between Texas and the upper Mississippi and the Ohio River system. It will bypass New Orleans. In fact, this committee authorized dredging in the Atchafalaya last year, so that that river is now being used very extensively. It takes the through traffic out of New Orleans Harbor and is a shorter distance, I think 150 miles closer. Barge freight rates will be computed on that mileage basis and will be less in cost.

We just feel that 75 feet is too narrow. A short time ago, and within the last 2 or 3 weeks, Mr. Chairman, there was dedicated and

opened to operation the so-called Algiers cutoff of the Gulf Intracoastal Waterway. That is a 75-foot lock and everyone concerned, as far as the navigation interests are concerned, believed that the thing was outmoded before it was ever opened for public use.

Mr. DAVIS. Have you presented your views to the Army engineers before they completed their plan?

Mr. THOMPSON. We presented our views to the district engineer in New Orleans and were requested to do so in March of this year. We heard all kinds of rumors as to the width of this lock. I heard rumors all the way from 55 feet to 110 feet. Yesterday for the first time General Hardin, for whom I have the utmost respect, as does everyone else in the navigation industry because he is an outstanding engineer, testified that it would be 75 feet. We just disagree with him on that.

We do not think that the Corps of Engineers, and I am reluctant to say this, have looked far enough into the future as far as inland navigation is concerned. I think the lock should be the standard width lock, namely, 110 feet. If you have a 75-foot lock, with barges 35 feet and 50 feet and 54 feet in width, you could not get two 50-foot barges through there. It would mean double locking, which would entail a delay.

We feel we are not asking for anything unusual. We are just asking for further consideration of this. As we view it, the Old River control project is probably a 10 year job. The amount of authorization was $46 million or $47 million. The appropriation bill that passed the House yesterday carried a little bit less than $5 million in it. So on that basis it will be a 10-year project. We would ask the authorization of this lock size in the Old River control structure be delayed until navigation interests have a further opportunity of pursuing the matter with the Corps of Engineers.

We do not think with a 10-year project it is necessary that the Congress at this time determine that lock size, because it is such an important matter that we would like to have further consideration of it. That is the prayer in the statement I am filing with the committee.

Mr. ROGERS. Just for my further information. I saw where the lock was, but could you point out for us the main line of traffic that would use this lock?

Mr. THOMPSON. It comes down through here and would come out in Morgan City, a bypass of New Orleans here.

Mr. ROGERS. Where is that?

Mr. THOMPSON. They are going to put in a control structure there to keep the Mississippi River from running down the Old River route to preserve the water level at the New Orleans area below, we will say, Angola. There is to be a navigation lock in it.

In the authorization bill Congress was supposed to come back, or the engineers were supposed to come back, rather, and report to Congress as to the size of the lock. We disagree with them on the width. Not the length or the depth over the miter sills.

Mr. DAVIS. We have your statement. You may be impeding progress here. I do not know. I have such great confidence in the Corps of Engineers.

Mr. THOMPSON. We have no intention of impeding progress.

Mr. DAVIS. You may very well do it, but we will give this further consideration.

I am not cutting you off or cutting the committee off from asking any questions, but we will come back to this for further discussion. We want to hear from some of the engineers, in particular the distinguished Army engineers, in whom we have such confidence. We want that development down there and do not want to delay it.

Without objection, your statement will be made a part of the record at this point.

(The statement referred to is as follows:)

STATEMENT OF CHESTER C. THOMPSON, PRESIDENT, THE AMERICAN WATERWAYS OPERATORS, INC., WASHINGTON, D. C.

ON OLD RIVER NAVIGATION LOCK

My name is Chester C. Thompson. I am president of the American Waterways Operators, Inc., a national association of domestic water carriers and operators serving the inland rivers, intracoastal canals and waterways, the bays sounds, and harbors of the United States. Members of the association which maintains its principal office at 1319 F Street, NW., Washington, D. C., constitute a substantial and important factor in the national transportation system and, as such, are an important element in the national defense program.

Maj. Gen. John R. Hardin, president of the Mississippi River Commission, in testifying before this subcommittee yesterday (May 22, 1956), requested authorization to build a navigation lock as a part of the Old River control structure to the following dimensions: 1,200 feet long by 75 feet wide, with a depth of 13 feet over the miter sill. His request was made in connection with the control works authorized under Public Law 780, 83d Congress, which provided for the expenditure of $47 million exclusive of the navigation lock that Congress must also authorize.

The disclosure by General Hardin before this subcommittee was the first information available to the barge and towing vessel industry of the lock dimensions proposed by the Corps of Engineers, although operators using the Old River route had previously been requested by the New Orleans district engineer to advise him of their current and contemplated usage of the route.

My purpose in appearing before the subcommittee is to respectfully request that the committee delay consideration in this session of the Congress of any authorization of the navigation lock to be built in connection with the Old River control structure. In my opinion there is valid reason to delay authorization. Furthermore, it is the opinion that no delay in construction of the Old River control structure will be incurred by postponement of authorization of the dimensions of the navigation lock, inasmuch as it is understood that the whole structure is approximately a 10-year construction project and that the construction of the navigation lock itself will be accomplished as a part of the last phases of the work.

We desire to make it perfectly clear to this subcommittee that it is not our intention, in any way, to delay construction on the control project as a whole. It is our purpose simply to delay authorization of the size of the navigation lock to be built, in order to allow more adequate time to explore what we consider to be sufficient reason to build a lock chamber of greater width than that proposed by the Corps of Engineers.

Lock chambers of a width of 110 feet have been adopted by the Corps of Engineers as standard navigation facilities on the Ohio and upper Mississipi Rivers. These rivers are essentially parts of the same navigation system of which Old River is also a part. For this reason operators of barges and towboats will be passing tows of the same dimensions through the Old River navigation lock that they will be passing through the navigation locks on the upper Mississippi and Ohio Rivers.

To provide a lock chamber of a width less than that already adopted as standard for the upper Mississippi and Ohio Rivers will mean that tows made up to operate through the upper river locks will have to be broken up, in a time-consuming and costly operation, in order to pass through the Old River lock. This will be true, if this lock is built to the 75-foot width recommended by the Corps of Engineers.

In March of this year, members of the American Waterways Operators, Inc., who are using or expect to use the Old River channel, were requested to give us their views on the most practical size lock chamber to be built as a part of the control works. While their opinions were not unanimous, a majority of the operators overwhelmingly favored a lock chamber 110 feet wide, giving as their reasons the type of towing equipment now in use or in stages of construction and the make-up of tows that they now use or expect to use on the Old River route.

Until May 22, 1956, we had no information as to the lock dimensions the Corps of Engineers would recommend. Therefore, this association—as the representative of the towboat and barge operators who do and will use this navigation facility—had not been afforded an opportunity to explore with the Corps of Engineers its reasons for determining a lock chamber width less than that which we consider desirable now and which will be even less desirable in the years to come.

As pointed out, we understand that there is no reason to rush authorization of the lock dimensions. We believe this is too important to our future economy to allow a mistake to be made, which may cost us additional millions of dollars to correct at some later date when the inadequacy of the lock's width dimension has been proven in use.

Again I respectfully ask on behalf of the barge and towing vessel industry—which will be the primary user of this navigation facility—that this subcommittee postpone consideration of the Old River navigation lock authorization to allow more adequate study to be made.

H. R. 9554—H. R. 9555—S. 3272

Mr. DAVIS. We are honored by having our majority leader, Mr. McCormack, present here. We have been competing for time to hear these projects for weeks, with the subcommittee on roads and the full committee, in taking up the highway bill, which involved a period of months of time. Now the Rivers and Harbors Committee is trying to get time to meet and this committee is trying to get time to meet and the Public Buildings and Grounds Committee also. I can say to you, our majority leader, that we have been a very active committee. We know you are also active and you are so helpful to all of us that we are going to ask you to come forward at this time and present a bill which we wanted to consider long ago, which was introduced by you early in January, and which, by the way, has already been passed by the Senate.

Come around, Mr. McCormack, if you will, please.

STATEMENT OF HON. JOHN W. McCORMACK, MEMBER OF CONGRESS FROM THE STATE OF MASSACHUSETTS

Mr. MCCORMACK. Thank you very much, Mr. Chairman and members of the committee. I appreciate the courtesy of the chairman and witnesses here. I will make this brief and to the point.

Of course, I have always been very much interested in the problem confronting the people of our country in various sections in connection with floods and those areas visited by floods, with the constant fear that they have of a revisitation. While my district has no serious flood problems, because we have no big rivers running through it, nevertheless I have always viewed this, as I do other matters, from a national angle.

As a matter of fact, in connection with the building of dams in the latter thirties I introduced a bill as a result of which the Federal Government now makes 100 percent appropriation for the building of dams. Prior to that, as you know, it was a Federal-State relationship,

where the State had to purchase the land and provide it free and clear from all encumbrances, and all of the administrative expenses involved, which was a deterrent because of the difficulties that confronted the several States in connection with their financial problems.

I have always felt that floods, where a river flowed through two or more States, were a national challenge. Also I have felt hurricanes were a national challenge to the Federal Government. So I introduced three bills exploring the subject. The first bill I introduced was related to New England and Pennsylvania and New York, and the dams there, and the flood situation there, as disclosed by last year's hurricanes. At the time I said that the bill, while confined to New England, New York, and Pennsylvania, might well apply to the entire country, so I had the entire country in mind then.

Later I introduced a bill covering the entire country, and my recollection is it is H. R. 9554. Senator Bush introduced a companion bill in the Senate, which is S. 3272, which has passed the Senate.

In connection with another bill I introduced, it increased the present $150,000 discretionary limit which exists with the Corps of Engineers to $300,000 or $350,000.

I am respectfully urging the committee to report out H. R. 9554 because I think that is the more comprehensive bill, and I also think it very, very adequately covers the situation and will be a powerful contribution to the solution of it.

Mr. DAVIS. I think it is 9555. That is your short bill.

Mr. MCCORMACK. No. The long bill is the one I have reference to.

Mr. DAVIS. Oh, you want us to consider your long bill?

Mr. MCCORMACK. Yes. Of course, if the long bill cannot come out I want the short bill, or rather, I should say, I would like to see the short bill come out. But the long bill is the one that I hope the committee will act upon, because I think the Department of the Army has given this whole subject very thoughtful consideration and, as evidenced by the letter of Secretary Brucker of May 7 to the chairman of the full committee, they say that they would not oppose H. R. 9555, if that is the number of the bill, of which S. 3272 is the companion bill. I introduced the bill originally and Senator Bush introduced S. 3272 as a companion bill in the Senate, and the Senate has acted upon it and passed it.

In the letter of May 7, 1956, to Congressman Buckley, Secretary Brucker said, "S. 3272 and H. R. 9554"—which is where I got 9554 from—

> would increase the individual project limitations to $500,000 and the annual limitation to $15 million with a provision which would require submission to the Senate and House Public Works Committees of reports of the proposed plans on projects estimated to cost in excess of $150,000.

That is in the law now, as you gentlemen know. Now continuing on:

> Work should not be initiated on a project costing in excess of $150,000 until the expiration of 30 days of continuous session of Congress following the transmission of the report. Should the committee determine to favorably consider S. 3272 or H. R. 9554 in lieu of amendment of section 212 as recommended by this Department * * *

I think that is a point of indication that they would not oppose the provisions of my bill or S. 3272. And they continue:

> * * * it is recommended that the bill be modified by changing the amount of $150,000 appearing in line 20 on page 2 of H. R. 9554 and in line 21 on page 2 of

S. 3272 to $250,000 in order to allow the Department to undertake projects costing not more than $250,000 without the restriction of having to submit reports to the Public Works Committees. Prior to initiation of work projects costing in excess of $250,000 it would require submission of such reports.

I think the proposed amendment is a very good one. What that does is, under the present law the Army engineer within the amounts appropriated by Congress, usually 2 or 3 million dollars a year, can start projects and can get local concurrence and local participation, as you know as well as I do, without removing it from the local community and local action and local approval and participation. They can start projects in any 1 fiscal year not costing more than $150,000 within the amount of the appropriation. This would up it to $250,000.

I think in the light of what happened that is a very excellent suggestion, but if S. 3272 and my bill become law, then in any project they would start anywhere in the country within the amount appropriated in excess of $250,000 and up to $500,000 they would have to report to the committees of Congress not necessarily for approval but for their information so that they could act upon it and express themselves one way or another in connection with it.

So I think in the light of the situation confronting the country, legislation of this kind is important and will make a valuable contribution to solving the hurricane and flood problems confronting the various sections of our country. I think the present $150,000 if it were raised to $250,000 would be of a strengthening nature.

Mr. JONES. May I ask a question?

Mr. DAVIS. Mr. Jones.

Mr. JONES. Mr. McCormack, would you have any limitation as to what the amounts of local participation would be percentagewise?

Mr. MCCORMACK. That would be a matter of the ordinary negotiations between the Army engineers and the local community. That is already provided for by law. It is pretty well established now on the local participation and local approval. It is all established by law and it would just be simply applying it to the larger amount.

Mr. JONES. I do not want to find myself in disagreement with you, but I do not think that is a firm and fixed percentage, for the simple reason that the Bureau of the Budget is requiring more than is usually anticipated from the local people to participate in the flood-control projects. Now, have you any suggestion as to what percentage would be expected, because as far as I know under the present law the Flood Control Act of 1944, which established drainage, requires local participation and also for land enhancement under the general provisions of the Flood Control Act which requires local participation. What I would like to know is, if we approve a project of $250,000 which the Corps of Engineers under the provisions of this bill would have the discretion to commence and to complete, then do you not think there ought to be some limitation on what the local people would do in the way of financial participation in the project?

Mr. MCCORMACK. Of course, from a practical angle I want to say I would be a poor witness in connection with answering that question, because I have no such project in my district. My whole desire is in looking at it from a national angle to try to make a contribution to the problem. I have no floods in my district to speak of, so I have had no questions of local participation in my district, or local approval. Other parts of Massachusetts and New England have that problem.

I have assumed under this $150,000 ceiling that the Army engineers—this has been in the law sufficiently long for them to have some kind of a general program in connection with local participation. Certainly the local approval is required by law, but as to the local participation, I am giving you a curbstone reaction to one part of your question—I think when you start writing into the law what the local participation would be that it might present some difficulties. I have sufficient confidence in whoever is administering the law in connection with any particular project to believe that they are going to undertake to do what they think is right.

Mr. BUSH. Will the gentleman yield?

Mr. JONES. I am through.

Mr. MCCORMACK. I do not know whether I have answered your question or not, but I think when you write restrictions in there you are likely to limit the operation, particularly in a matter of this kind.

Mr. DAVIS. Mr. Bush.

Mr. BUSH. In any event, you would not want to see the local participation increased above what it is on their present formula, whatever they are working on at the present time?

Mr. MCCORMACK. As a matter of fact, so far as I am concerned, the nearer it comes to total Federal appropriation, the better I will like it, particularly where floods and hurricanes are involved, and where the lives of human beings are imperiled, and property is endangered.

Mr. JONES. Let me say this: I do not know that there is any formula and the formulas vary from project to project. Some projects have been brought in here by the Corps of Engineers in which they require, let us say, 70 percent local participation, and a similar project can be reported from another geographical area in which there will be 20 or 25 percent of local participation. So it depends on where it comes from.

The only thing I wanted to explore is whether or not you have any fixed opinion as to where there should be some determination as to what the local participation would mean; because we cannot rely on existing legislation to determine whether or not there will be local participation, and in what amounts.

Mr. MCCORMACK. Suppose you wrote into the law that not more than 20 percent should be the extent of local participation. You might run into difficulties. I have answered the question, as far as I am concerned, that the nearer it approaches total Federal participation as far as appropriations are concerned, the better I like it. That is my viewpoint. Some might disagree with that.

Mr. BECKER. It is not a question of disagreeing with you, Mr. McCormack, but I think somewhat in line with Mr. Jones' question, we do have to determine the point here of local participation. It is not because some of us might be against total Federal aid in projects of this kind for the saving of lives, and so forth, but in many projects that we have to consider there is enhancement of values to individuals and individual property owners and individual communities. Consequently it has never been logical before this committee to consider total Federal aid in cases of that nature. It could very well apply here.

I should not say that is Mr. Jones' idea, but my own thinking is along those lines. We would have to provide some formula for local participation because of those reasons.

Mr. McCORMACK. Do not the local communities, whether State or political subdivisions, have a powerful voice? There has to be an agreement.

Mr. BECKER. Yes.

Mr. McCORMACK. There have to be negotiations and agreements. I would hope—and what I am giving you is a curbstone opinion because from a practical angle I have no problems in my district, and my only desire is to help other sections of the country——

Mr. BECKER. You want to get something done.

Mr. McCORMACK. Yes. In different sections of the country, both in my area and elsewhere. That is such an interesting point, but I hope you are not going to inject it into this bill but rather will consider it separately as a separate matter.

Mr. JONES. I have no idea of doing that, but I wanted to get an idea in order to attain uniformity as to the application of the provisions of this bill, and as to how it works universally. That is the only point I raise in that connection, since we have not heretofore had uniformity, as to whether cost allocations should be consistently the same throughout the country, because we have had projects on flood control where land values were $300 an acre and the cost of the project was in excess of $1,200 an acre, and the project may be 100 percent flood control. Then we have had other projects where it has been a flood control project and they require 70 percent local participation.

The only point I was bringing up was as to whether or not we can arrive at some uniformity or some argreement as to these projects. I do not want to belabor the point because I can well understand that you have got to judge each barrel on its own bottom, but it has given me some concern.

Mr. McCORMACK. I know, Mr. Chairman, that my friend from Alabama has certainly taken a keen interest in this problem. He has been all over the country and I am in a sort of uneven position in discussing that particular subject with the gentleman from Alabama, or any other member of this committee, because you know your subject from that angle and I do not know it from the angle of having any practical experience so far as my district is concerned.

I do think, however, that that is the subject that the committee ought to go into itself, because it stretches across lines everywhere, not only in this bill if it becomes law.

Mr. JONES. I agree that it does do that. Of course, I should not attempt to resolve the question with this bill, but I just wanted to explore what thought you had given to it.

Mr. McCORMACK. I am sorry I am not a more valuable witness on that particular subject. I hope I am more valuable on the purposes and intent of the bill and in my sincerity in trying to help all sections of the country.

Mr. DAVIS. Before I recognize Mr. Baldwin I would like to throw out the thought that we are having some difficulty with the Bureau of the Budget. We think they are reaching out too far and instructing the engineers as to what they will and will not approve. That is the crux of the thing.

Mr. Baldwin?

Mr. McCORMACK. Of course, I could answer that and create an explosion, so I will not answer it.

Mr. BECKER. I think that is very nice of you, Mr. McCormack.

Mr. BALDWIN. Mr. Chairman and Mr. McCormack, I would like to say that where we do have a limitation in a bill of this type of a maximum of $15 million to be used for this purpose, the matter of local participation works in two ways. If the Corps of Engineers does decide that the local participation is warranted from the standpoint of a particular benefit to particular property, and local people can and are willing to raise the funds, that would make it possible for us to cover more projects with the $15 million than if we assume that part and did not ask the local people to contribute anything where there is a direct benefit.

So actually the bill as it stands will make possible the realization of the accomplishment of more projects without a specific limitation than if a specific limitation were thrown into it.

Mr. MCCORMACK. I thoroughly agree with you. I can see where in a project there would be a greater local participation than in another project. It is a question of fact and a question of negotiation. If the Bureau of the Budget is injecting itself too severely, why, that is unfortunate. I will not go beyond that, but the purpose of this bill if enacted into law is that it would be very beneficial.

Mr. DAVIS. Especially in emergency cases.

Mr. MCCORMACK. Exactly. And in the nuclear age it gives a wide discretion both to the Army engineers representing the Government and the local communities, whether a State or political subdivision thereof. It is not one-sided, but several-sided—at least two-or-more sided. It gives a lot of discretion, but a lot of good can come if such a bill is enacted into law, and I do hope if the committee does not want to accept the $250,000 that the bill will be reported anyhow, but I think the $250,000 is a very wise suggestion; and then over and above that, on projects up to $500,000, it reports to the two committees of the Congress.

Mr. ROGERS. Mr. McCormack, I wanted to bring out a point on that. Of course, I know of your interest in flood control which you have exhibited in regard to places all over the country. I was made particularly aware of it last year when the appropriation came up for flood control and Mr. McCormack was one of the leaders who increased the funds on the floor of the House. It was very successful too and I was greatly in sympathy with the bill.

I do wonder if you would object if the committee reported it out without a change in the $250,000. In other words, if the committee felt it was probably advisable for the Army engineers at least to report to the Congress on projects over $150,000.

Mr. MCCORMACK. Of course, if the committee in its wisdom does not adopt the suggestion of Secretary Brucker—which I think is a very good one—the bill as originally introduced by me and Senator Bush has it in there. The only thing is when I get a good suggestion from a Republican source I like to have a flexible mind to receive it.

Mr. ROGERS. Thank you very much.

Mr. DAVIS. Thank you very much. We are very proud that you should have appeared personally before us this morning.

Mr. MCCORMACK. I am highly honored. Thank you very much.

Mr. DAVIS. Mr. Congressman Philbin.

Do you have a prepared statement, Mr. Philbin?

STATEMENT OF HON. PHILIP J. PHILBIN, MEMBER OF CONGRESS FROM THE STATE OF MASSACHUSETTS

Mr. PHILBIN. Yes.

Mr. DAVIS. We do not want to cut you short at all because we are glad that you are here, but we are squeezing you in between some witnesses who have to catch airplanes.

Mr. PHILBIN. I appreciate that and I am very thankful to my distinguished friend, the chairman of the subcommittee, and the very able members of the subcommittee also, for the opportunity to present my views on behalf of the bill, H. R. 9554, and similar bills and measures, to provide general authorization for small flood control projects and flood protection works throughout the Nation.

The basic bill before you, as you all know, was introduced by my good and able friend, the majority leader, whom you have just heard, who has taken an interest in flood control and other such matters on the floor of the House in his capacity as majority leader, and presented splendid testimony before you in support of his own bill.

I have a companion bill which relates to the same subject matter, and I understand there are several other bills of a similar nature pending before you. As you know also, Mr. McCormack's bill, which was introduced first in the House, has already been passed by the Senate, and I assume it is now pending before you.

I know you all appreciate the extreme urgency of these measures and I can speak as one who represents a district that probably was the most hard-hit of all the districts in the Northeast in the terrible floods which visited us last summer and fall. Of course, it is not only with respect to my district that I speak, and my State, and my area, but also for the entire Nation.

Mr. JONES. Will the gentleman yield?

Mr. PHILBIN. Yes.

Mr. JONES. You are representing not only yourself here this morning, but are you speaking for the the entire New England States?

Mr. PHILBIN. Yes, sir. As chairman of our delegation's committee on flood relief and rehabilitation. I might say in that connection the able gentleman from Alabama visited Massachusetts right after the terrible floods of last year and he gave us very valuable assistance. He undertook extensive hearings in Springfield, Mass., in the district of my friend, Mr. Boland, and took testimony there. This is the first opportunity I have had publicly before this committee to express my appreciation and gratitude for the splendid consideration which the able gentleman from Alabama gave us on that occasion, and has been giving us since in trying to assist us in finding adequate rehabilitation and relief measures for the terrible conditions that afflict us.

The objectives of Mr. McCormack's bills and related bills are well known to all of you, and I will not take the time now to analyze their provisions, but in effect the measure which I personally think is one of the best on the subject presented to the Congress a long time ago will greatly accelerate urgently needed public works for flood control by increasing to $500,000 the small project authority for flood control.

As you know, yesterday the House passed the regular public works appropriation bill, which contained many necessary projects that will be very helpful to the States and communities concerned. How-

ever, even when these projects get underway there will be large gaps, and very large ones in many places, in the overall flood protection program, which will be largely met by bills like Mr. McCormack's bill and others being considered by this very able committee. I understand the bill has been passed not only by the Senate, but has also been approved in principle by the Secretary of the Army. I have read the communication which he sent to Mr. McCormack and I believe possibly also was or will be presented to this committee, and he is very clear on the point that he is in substantial agreement with the principle in these bills.

Unquestionably it would promote speed and efficiency in carrying forward not only a number of desirable, but to my mind urgently needed, smaller projects. I think it is absolutely imperative for the House to take action on the measure as soon as it possibly can. In my opinion it is the answer, not the complete one, necessarily, but a very substantial answer to the alleviation of a large variety of water resource problems and water flowage condition problems throughout the Nation.

So far as my own district and State are concerned, that is true and it is also true of the entire Northeast area.

Also the early passage of this bill would be of the greatest value in helping us to secure relief and rehabilitation as well as future protection against the floods which, as you all know, periodically ravaged us with such terrible results last summer and fall. I am confident that this very able committee dealing with these matters all the time has expert knowledge and wonderful experience in handling these matters, and which has contributed so greatly to the solution of many of these problems in the past, will give this vital matter prompt and careful attention, and you will come up in your wisdom and calm judgment and great ability as speedily as possible with the McCormack bill and some composite measures embracing the principles in these bills, including my own, so that it can be reported to the House and acted upon at an early date.

I want to say, gentlemen, representing a district which was very sorely afflicted by the floods, and speaking for the entire Massachussetts congressional delegation, I earnestly plead with you—I earnestly plead with you especially for expeditious action in this matter.

Of course, I thank you, Mr. Chairman, and all of the members, very, very much, for your kindness in hearing me at this time and the consideration you are giving to these matters, which I deeply appreciate.

Mr. DAVIS. Without objection, the Chair would like to rule that any member of your delegation, or any colleague from New England or anywhere else in the country for that matter, who would like to file a statement, may be permitted to do so at this point in the record, on these bills.

Mr. PHILBIN. I would appreciate that if the committee would extend permission for my colleagues to file statements at this point in the record, relating to this bill.

Mr. DAVIS. Without objection, that permission is granted.

Mr. PHILBIN. Thank you very much, Mr. Chairman and gentlemen. I greatly appreciate your consideration.

Mr. DAVIS. We will now hear from Mr. Macdonald, from Massachusetts.

STATEMENT OF HON. TORBERT H. MACDONALD, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MASSACHUSETTS

Mr. MACDONALD. Mr. Chairman and members of the Subcommittee on Public Works, I am Torbert H. Macdonald, Representative from the Eighth Congressional District of Massachusetts. I want to thank you, Mr. Chairman, and the members of the subcommittee for granting me this privilege of making a brief statement relative to H. R. 9554, which provides for expediting the construction of small flood-control works for the protection of our communities. As you know, H. R. 9554 was introduced by our very able and distinguished majority leader, Mr. McCormack.

Before analyzing the provisions of the bill I want to state that I am vitally interested in this measure not only because of its great value to my Eighth Congressional District and State, but also for the entire flood-stricken Northeast, as well as the other sections of the country which are visited from time to time with devastating floods.

Specifically, this bill amends section 205 of the Flood Control Act approved June 30, 1948, and would increase the amount available to the Secretary of the Army for construction of small flood-control projects not specifically authorized by Congress from $2 million to $15 million per year. The maximum per project would be raised from $150,000 to $500,000. The localities concerned would be consulted and would be required to meet the usual requirements of local cost sharing.

I am very much in favor of this amendment for the reason that it would enable the Corps of Engineers to initiate and carry out small projects without the loss of time required in the usual procedure. Many projects could be completed in less time than it takes to go through the present procedure. Thus, a start could presently be made on the backlog of many small projects already authorized. Emergency needs could be met quickly. Areas subjected to damaging flash floods could be provided in a short time with protection to prevent recurrences. In other words, the flood problems of a comparative minor nature which exist throughout the Nation could be relieved very quickly and most efficiently by the passage of this bill. Greater elasticity in planning would result.

I feel confident that some of the small projects in my own State could have been constructed, under this amendment, and have saved many lives and much property. It is very evident that $500,000 would cover many projects which would not be accomplished under the previous $150,000 limitation. Among these are making permanent works such as dikes, levees, and the like resulting from emergency measures following floods in the past. Over 40 projects constructed in 24 States under the existing section 205 (as amended by sec. 212) have been successful and have proven that minor flood problems exist throughout the Nation. Experience has also shown that the $150,000 limitation has prevented construction of a number of vitally needed projects. It has been necessary to follow the usual time-consuming procedure in many of these instances, running the risk that a flood may occur at any time before the procedure is completed.

There is little danger that this will prove a runaway temptation for "make work." There is ample check on the size of the project

and the provision that the Federal Government does not commit itself to any further and possibly large-scale projects, unless the Congress sees fit to approve in the usual manner.

In conclusion, Mr. Chairman, let me say that when the McCormack bill is finally enacted into law, it will enable the Army engineers to break through the bottleneck of time which has been the most serious obstruction to speedy action for permanent flood protection.

Early passage of this bill would be of great value in helping us in my own district and State, as well as the Northeast area, to provide the people the protection against the ravages of floods for which the need was so tragically demonstrated last summer and fall. It is my hope that this committee will act promptly on this measure so that it can be reported to and acted upon by the House at an early date.

Thank you.

Mr. DAVIS. Thank you.

(Further statements on the bill follow:)

STATEMENT OF CONGRESSMAN WILLIAM H. BATES

Mr. Chairman, I am grateful for this opportunity to emphasize the urgency of the proposed legislation before you which would provide for general authorization for small flood-protection work. The principal measure before you, H. R. 9554, by my distinguished colleague, Majority Leader John W. McCormack, would increase to $500,000 the present cost limitations in small flood-control project authority and, if approved, would expedite action on much-needed public works.

There is a provision in the bill which would require submission to the Senate and House Public Works Committees reports of proposed projects and estimated costs in excess of $150,000. The measure is important from the standpoint that it would fill large gaps in the overall flood-protection program approved by the House recently.

H. R. 9554 is one of a number of bills pending before this committee seeking to aid flood-stricken areas throughout the Nation. The Sixth Congression District, which I have the honor to represent, is vitally affected by this legislation, inasmuch as a good part of it lies in the so-called Merrimac River Valley whose residents have experienced the ravages of flood waters. The city of Haverhill, Mass., has been hard hit in the past, and the losses by this great shoe manufacturing center have been tremendous.

H. R. 8454, which I filed in January of this year and referred to the Committee on Appropriations, provides for funds for preliminary planning and for construction of necessary flood-control measures in Massachusetts including the Merrimac River Basin. My keen interest in flood control is also reflected in H. R. 9689, to provide for an experimental national flood-indemnity and reinsurance program.

Effective flood control must depend on a good extent on the construction of many smaller projects in our river valleys and streams, and I have no hesitancy in urging your approval of legislation which would pave the way to early and effective action.

Nineteen fifty-five is regarded as the worst natural-disaster year in the history of our Nation. Hurricanes, floods, and tornadoes swept over large sectors of the country, causing loss of lives in the thousands and the destruction of billions of dollars of property. We know that part of this great tragic loss could have been everted by flood control. The lesson has been a costly one and it is imperative that we plan immediately for the future. Your prompt and favorable consideration of this proposed legislation before you is urged. Nineteen fifty-six should be the year of decision in the campaign for adequate control of destructive flood waters.

STATEMENT OF HON. HORACE SEELY-BROWN, JR.

Mr. Chairman, I appreciate the opportunity of appearing before your committee in support of the so-called Bush-McCormack bill, to increase and make certain revisions in the general authorization for small flood-control projects.

The Congress has recognized that in the case of small flood-control projects the usual laborious process of specific authorizations and appropriations can be safely bypassed. The Flood Control Act of 1948 provides a geenral authorization for projects of this kind, with limitations on the cost of any single project of $150,000 and $3 million on the total amount of expenditures in 1 fiscal year. Our recent flood disasters have demonstrated that much work which is urgently needed cannot be accomplished within the extremely restrictive limitations of present law. The bill under consideration would correct this situation by raising the limitations to a more realistic figure of $500,000 for single projects, and $15 million for total expenditures in 1 fiscal year. Safeguards are contained in the measure by the following provisions:

Concurrence must be obtained from the affected States, or political subdivisions prior to the commencement of each proposed project;

In the case of projects which would cost in excess of the present limitation of $150,000 justifications must be submitted to the Committees on Public Works of the House and Senate before work is commenced;

Compliance with the provisions of local cooperation specified in section 3 of the Flood Control Act of 1936, as amended, must be met, and the work must be complete in itself and not commit the United States to any additional improvement to insure its successful operation.

It is unnecessary, I am sure, to reiterate at this time the great loss of life, human distress, property damage, and disruption of industrial production so vital to the national economy and the national defense which occurred in the New England area, and other areas of our country, as a result of hurricane storms and resultant floods last year. As we all know, the Corps of Engineers undertook many temporary improvements under Public Law 875 following those floods. However, the flood potentialities at the present time emphasize the necessity of permanentizing some of those improvements if we are to prevent erosion during future flood conditions. If this is not done, the work which was accomplished will have been a waste of time and money, and the hazards resulting from spoil area material being thrown into the stream beds will constitute a continuing threat of additional flooding. I do not in any sense intend my statement to be a criticism of the work of the Corps of Engineers. I know from personal observation of the exceptionally fine job which they did following the two floods in Connecticut last year. They were, however, under limited authority and could accomplish only works of a temporary or emergency nature. I sincerely believe that an additional investment should be made to prevent a loss of our previous investment or capital put into temporary jobs, because in the long run it will be more economical.

We all know of the delay always experienced, which in many cases extends into years, in securing authorization by statute of specific projects, and then securing the necessary appropriation for each undertaking before planning and construction can begin. This bill would permit the Corps of Engineers to initiate in the immediate future those small, but vital, flood-control projects necessary and feasible to protect against flooding or reduce the damage to communities which have been so sorely afflicted by flood disasters within the past year.

It is my understanding from conversations with the Army engineers that there are 2 or 3 areas in my own congressional district where small works might be accomplished, within the limitations of this proposed legislation, which would provide immediate protection from flooding, and which would eventually become a part of the overall comprehensive flood-control program which will be recommended for the entire area. I am sure this same situation would prevail in many other areas of the country, since more than one-third of our States have suffered from flood damage in the past 3 years. Although I know the Army engineers are proceeding as expeditiously as possible in their studies, which will result in a comprehensive program of flood control for New England, such studies are necessarily time-consuming due to the technical data which must be developed. To cover the most urgent control needs, I believe it is imperative that we give favorable consideration now to the legislation under discussion. The small projects which could be accomplished under the provisions of this legislation would be links in the chain being built to hold back the ravages of nature. Every day we put off providing protection, which our citizens have a right to expect, brings us closer to the next devastation, and this we cannot afford.

I most earnestly urge the committee to take early and favorable action on the pending legislation.

WEST BRANCH RESERVOIR, MAHONING RIVER BASIN, EASTERN OHIO

Mr. DAVIS. Now we pass to a project which our great colleague and friend, Mr. Mike Kirwan, is interested in. I am going to ask General Itschner to make a statement at this point, please.

STATEMENT OF MAJ. GEN. E. C. ITSCHNER, CORPS OF ENGINEERS—Resumed

General ITSCHNER. Mr. Chairman and members of the committee: A review report of survey scope on the West Branch of the Mahoning River in Ohio was authorized by resolution of the House Public Works Committee on March 10, 1955. A report is now being prepared by the district engineer, which is due for completion in December 1956. However, there is an unusual amount of data available at this time, partly because we had a recent report on a larger basin in the Mahoning-Grand River report, which also applies to the current project.

The Mahoning River originates in the vicinity of Ravenna and upstream from Warren, Ohio, and flows down to the confluence of the Mahoning and Shenango Rivers, and thence into the Beaver River, and thence into the Ohio River, shortly below Pittsburgh, and in the vicinity of Wheeling, W. Va.

This area produces about 10 percent of the pig iron produced in the United States, and about 9.9 percent of the steel, largely between Warren and through Youngstown, which is a very important industrial center, and all the way down through New Castle.

The town of Warren had a population in 1950 of about 50,000 people, and the town of Youngstown close to 150,000 people.

Mr. GRAY. Is that New Castle, Pa.?

General ITSCHNER. Yes, sir. The boundary line between Pennsylvania and Ohio passes close to the town of Sharon, between Youngstown, Ohio, and New Castle, Pa. There are four fairly large existing reservoirs in that area. First there is the Berlin Reservoir, which is a Federal reservoir built during the war and concluded in 1943. There is the Mosquito Creek Reservoir which was built during the war and completed in 1944. There are non-Federal reservoirs, namely, the Meander Creek Reservoir and the Milton Reservoir. The Milton Reservoir was built in 1917, so it is very old. The Meander Creek Reservoir is entirely for water supply. Milton Reservoir is for flood control and for low-flow augmentation, as are the Berlin Reservoir and the Mosquito Creek Reservoir.

The problem in the basin is twofold. Flood control is required and low-flow augmentation is necessary in order to improve the condition of the water as it goes through this very intensely developed industrial area between Warren and New Castle. Floods have averaged 1 every 2 years since 1910. The flood of record, which occurred in 1913 although there have been very large floods since that date, would today cause an estimated $29 million of flood damage at today's prices.

The average annual damage with conditions as they exist today, with the benefits of the Berlin, Milton, and Beaver Creek Reservoirs included, amounts to $572,000. The average annual damages without those 3 reservoirs would be $2,688,000.

The low-flow augmentation feature of the existing reservoirs is quite important. The average annual amount of increase to the flow is 275 cubic feet per second, which is increased in summer to 470 cubic feet per second, and reduced in winter to a minimum of 185 cubic feet per second. This water is used largely as part of the industrial processes for the steel mills and the other plants along the river, particularly for cooling water. The water is raised to such high temperatures that during World War II great efforts were made to complete these two dams so that war production could continue without reduction because of the high temperature of the water in the stream.

In order to take care of this problem it is proposed a dam be constructed on the West Branch of the Mahoning River. An enlarged view is shown here. This would be an earth-filled dam, with a spillway at the north end. It has not been completely designed as yet sufficient for submission in a report, but enough work has been done so we know the approximate cost of that dam, which would be about $14 million.

Local interests would be expected to contribute for the values which they receive from the low-flow augmentation and they have indicated they are willing to contribute the amount required to compensate the Federal Government for this portion of the project. We do not know at this time how much that would be, but it would be somewhere in the vicinity of 40 to 60 percent of the entire cost of the project, which I stated was about $14 million.

The benefits from the project would be divided something like this: For flood control, $386,000, which is by far the major portion of the benefits from the project; pollution control, $78,000; improvements to the industrial water supply, $174,000; improved land use also, because some of the land downstream is agricultural, and particularly in the vicinity of the dam on down to Warren, $10,000, for a total of $648,000.

The benefit-cost ratio—and this is tentative, but we think it is a fairly good figure—is 1.14 to 1.

That, sir, completes my presentation. Are there any questions?

Mr. GRAY. Mr. Chairman.

Mr. DAVIS. Just a moment. Governor Dempsey?

Mr. DEMPSE. General, do you say you have sufficient studies to give some idea of the feasibility of this project?

General ITSCHNER. Yes, sir. We have proceeded quite far with our studies.

Mr. DEMPSEY. Would it be favorable or unfavorable?

General ITSCHNER. It would be a favorable project. We are certain it would be a favorable project. We give the benefit-cost ratio of 1.14 to 1. We think it is a conservative estimate.

Mr. DEMPSEY. The local participation is 40 to 60 percent?

General ITSCHNER. It will vary somewhere between 40 and 60 percent, depending on our further studies and cost allocations, which have not been made.

Mr. DEMPSEY. That is a pretty generous contribution, is it not?

General ITSCHNER. Yes, sir. And they have indicated they are prepared to make that contribution.

Mr. DEMPSEY. That is all.

General ITSCHNER. This is entirely an industrial contribution.

Mr. GRAY. Mr. Chairman, I have just one question.

Mr. DAVIS. Mr. Gray.

Mr. GRAY. General Itschner, I want to know how many thousands of acres this lake will cover after the dam is built?

General ITSCHNER. The area it covers?

Mr. GRAY. Yes.

General ITSCHNER. 3,325 acres is what it covers in the reservoir.

Mr. GRAY. I suppose this is lowland?

General ITSCHNER. It is lowland, but some of it is farming land. But there are no communities in the project in the reservoir area.

Mr. GRAY. The reason why I ask, we have an area similar to this in my district, and the people have formed a conservancy district in the hopes of building such a reservoir as this. Most of our land is lowland, with timber, and possibly covering 25,000 acres.

General ITSCHNER. Part of this is agricultural land and being used, and part of it is low-lying marginal land.

Mr. GRAY. Possibly 3,000 acres?

General ITSCHNER. 3,325 acres.

Mr. GRAY. That is all.

Mr. BECKER. Maybe I missed something in the beginning, but if the study is not completed and the cost estimates are not completed, and the design of the dam and other things of that sort are not completed, maybe I missed something, but what is this doing before us now?

Dr. DEMPSEY. We have five before us in the last omnibus bill. Is that correct?

General ITSCHNER. That is correct.

Mr. BECKER. Where the studies were not completed?

General ITSCHNER. Yes, sir.

Mr. JONES. One for $100 million.

Mr. DAVIS. On the Delaware River.

Mr. DEMPSEY. The General is giving us an assurance that the report will be such that the committee could be assured of the fact that it will be approved.

Mr. JONES. I understood the General to say all of the data that will be required on the project has been submitted to the point where they can make their firm calulations on the benefits and considering all of the necessary ingredients that naturally attend the consideration of the project.

General ITSCHNER. We have enough data to be sure the project is a favorable one. We have an unusual amount for a project of this type.

Mr. DAVIS. Mr. Bush, I can see a steel mill coming up. Maybe Mr. Kirwan can add to that. He has a very long formal statement here and we are going to make that a part of the record, but will you come around now, Mr. Kirwan? Are you about to biuld a steel mill over there?

STATEMENT OF HON. MICHAEL J. KIRWAN, MEMBER OF CONGRESS FROM THE STATE OF OHIO

Mr. KIRWAN. Mr. Chairman, it is a prvilege and a pleasure to appear before this committee this morning, because I served 2 years on this committee, from 1940 to 1942. I have been on public works ap-

propriating for the reclamation end of it now for 14 years, and have made many trips abroad.

This is not a challenge I am tossing out. I am telling you facts. Of all the projects I voted for—and I voted for every project that ever came before the Congress in the 20 years or so I have been a Member—I never saw a project to equal this one and such a badly needed one. The State representative of an Ohio State agency said last week that of all the rivers on the earth this 20 miles here is the worst from a pollution standpoint. If a duck should land in the Mahoning River while he is flying over it, he could be cooked. I mean that seriously. It is the only river in America you go through in January on the railroad and you wake up in the moring and see the steam is coming up. You would think you are at a geyser in Yellowstone Park.

This project is already authorized. In 1938 the Rivers and Harbors Congress authorized the construction of three projects—Mosquito, Berlin, and Eagle Creek Reservoirs. The land had to be purchased for Eagle Creek Reservoir and when we went to buy it we found a silicon mine there. It was too expensive to purchase that land. On the night of Pearl Harbor President Franklin Roosevelt said there will not be a dam or reservoir constructed for the duration of the war. The Berlin and Mosquito Creek Reservoirs were so essential they built those two projects so fast, though, during the war, that the Army Engineers worked around the clock—the only projects in the United States where that was done.

What do I mean by that? Let us take the testimony of the head of United States Steel. This is what he said about it before the Senate committee. This is Mr. Cummings, the manager. He said:

> In the aggregate I estimate if the present war shortage continues several months of the year, and the records indicate such a situation can be expected and on the assumption the production figures of June 1941 are representative of the war shortage, the loss in steel production in the Carnegie Steel plant is about 4,000 tons a month or equivalent to 48,000 tons a year can be anticipated. This loss in production is equivalent to the construction of 2 10,000-ton cruisers for the Navy and to supply about 1 million 105-millimeter antiaircraft shells for the artillery, or to make 3 million Garand rifles.

That is one plant, and they are losing that today.

I will give you a picture of the benefits involved in this. When we go into an emergency, the first thing we have is an OPS, an Office of Price Control. If some little hamlet wants to put a girder into a church, they set up a board in the local town and then it goes to State and then it comes to Washington. Every emergency we get into you have a crowd of people scattered all over this city and others to say that you cannot have that steel girder, but we think nothing of wasting billions of dollars worth of steel for the want of spending $10 million or $14 million, as the Army engineers said, on a project like this. They already have the data and it has been surveyed a dozen times. It is the most surveyed place in the United States. It is not like the rest of this country.

What does it take to produce a ton of steel? The Steel Institute said this: It takes something like 14,000 gallons or 57 tons of water, 13,757 gallons nationally per ton of pig iron production. That is to produce 1 ton of pig iron. At Youngstown Sheet & Tube Co. the

Steel Institute said in a report 1 ton of pig iron produced took 54,000 gallons of water.

Just stop and think of that. In the Nation and all over the country it only take 13,000 gallons of water to produce a ton of pig iron, and here it is 4 times as much, and we do not have the water to produce it.

In 1939 we shut down the whole valley because we ran out of water. This is the fourth largest steel center in the world, and it was shut down for the want of water until they got the first rain so that they could open up the plant. There is nowhere in the world where they are as low as we are there.

Here we are shouting about being a great nation. Our production in 1939 was 7 million tons. Today the production in that valley is 11 million tons. Now we have run out of water again. They thought they had to do it last year, but why am I here in a hurry now? At the request of private industry, and utilities and power companies, to get this as fast as I can get it, because they are going to put into that valley now in an expansion another million tons of steel production, and the water is not there. The water is not there and it cannot be there until you build this reservoir. That is what the Army engineers failed to tell you. Probably $100 million will be lost and the business and everything in that valley will be reduced.

What this Nation needs most now is steel. There is a crying need today for steel. Think of the expansion that is going to take place. Republic Steel is going to build a vast expansion program at its Warren and Youngstown plants. Youngstown Sheet & Tube is planning an expansion at Youngstown, also the United States Steel. There is not sufficient water there now for the steel they are making at the present time.

I have seen every project in the past 20 years built in America. I have been in the Ruhr Valley and I stepped out into an ore yard and followed that ore through the Ruhr Valley. I sit here this morning before this committee and say I have seen no project in this country—and do not get me wrong because I voted for every one, and if I had to do it all over I would cast my vote for them again—I have seen no project as urgent as this one with the amount of money involved.

Milton and Meander Dams were built by the city of Youngstown. I am only talking for the benefit of this Nation and the benefit of all concerned when I say that this is the most worthwhile project I have even seen, and it has been my privilege in 14 years to appropriate for the Grand Coulee and Shasta, Parker-Davis, Big Thompson, and every one of them. I have never seen anything to equal this project. It only costs $14 million to build it and local interests are willing to pay 40 to 60 percent of it. Probably they would not ask the United States engineers to go in and build it but would build it themselves if they were allowed to do it. They built their own dams at Milton and Meander before they were stopped by laws of Congress which said that you could not build anything over a navigable stream.

That is why we are pleading with you today, to authorize the West Branch project and get the construction underway, because if we ever get into another emergency we will be sunk without it.

Mr. DAVIS. In other words, those steel mills need that water?

Mr. KIRWAN. Not only the steel mills, but also General Motors wants to break ground in this area for the largest assembly plant in

the world, which is going to cost $85 million to construct. The only reason why they are not breaking ground now is that they say they cannot break it until after New Year's because of this water situation. They have signed their contracts and have bought the land.

Here is the largest corporation in the world, gentlemen, General Motors, which has postponed the breaking of ground for 6 months because they have no water until this thing goes through so it will assure them that they can get the water from Berlin Dam and Reservoir.

The city is building and constructing a pipeline at a cost of 5 or 6 million dollars, which takes so much water out of Berlin over to Meander Dam that they built. The Government has nothing to do with that land. They are buying it and putting the pipeline there to get so many more gallons of water a day. The city of Warren asked for 10 million more gallons for drinking purposes out of Mosquito Reservoir. The water is so valuable that the city of Niles offered an option for taking 10 million gallons of water a day more.

I have seen nowhere in the United States or abroad where water is needed more than it is in this valley. I am asking today you to approve this badly needed West Branch Reservoir.

I would like to have this small statement incorporated in the record, and I am thankful and grateful for the privilege of appearing before this great committee. I hope when you get to act on it, that it will be favorable action, because if there was ever a place that needed water, the industry in that valley and the industry coming into that valley which has to serve this Nation needs it. I am speaking there of General Motors, for example, which is going to break ground for an $85 million project, and the only way they can do it is through having this reservoir erected. That is why I say the Army engineers cannot estimate the value of this project. It runs into billions and not millions.

Mr. DAVIS. Are there any questions?

Mr. MCGREGOR. Mr. Chairman, I am not a member of this committee, but I certainly appreciate the opportunity of listening to the presentation of General Itschner as well as Congressman Kirwan. I certainly recognize the situation in Youngstown. It is a very serious situation, and I join with Mike in asking that the committee give very favorable consideration to his request.

Mr. BUSH. Mr. Chairman, I just want to say that I am very much impressed with Congressman Kirwan's presentation on this project.

Mr. KIRWAN. I have told you the truth in every word.

Mr. BUSH. It would seem to me after the explanation you have given that there is a great need for something to be done.

Mr. KIRWAN. It is not that I want to take a short cut or anything like that. It would be easy to wait another year for the Army engineers, but here is General Motors, which cannot break ground for this which will be the largest assembly plant in the world, until after they are assured of this water. It will be an $85 million plant, and that is the only thing holding it up. They are waiting to see if they are going to get this water. That is the only problem.

Thank you.

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. I appreciate having the opportunity of learning something about the project.

Mr. KIRWAN. Thank you, and I am very happy to have the privilege of appearing before you.

Mr. DAVIS. Without objection, Mr. Kirwan's prepared statement will be made a part of the record.

(The statement referred to is as follows:)

STATEMENT BY CONGRESSMAN MICHAEL J. KIRWAN

It is a distinct pleasure to appear before you today to ask your favorable consideration for authorization of a low flow and flood-control reservoir project in which I am deeply interested and which, in my judgment, is one that will yield enormous national benefits.

This is the proposed West Branch Reservoir in the Mahoning Basin in eastern Ohio.

The United States Army Corps of Engineers has recently completed a survey of this project, under a resolution adopted by the House of Representatives Public Works Committee under date of January 6, 1955, and has found it feasible and economically justified, and has recommended its authorization and construction.

This proposed reservoir will provide further protection against devastating floods and against severe droughts, which in the past have caused many millions of dollars of loss in flood damage and loss of production in one of the Nation's most populous and most productive industrial areas. This is the Mahoning Valley, which is one of the most important steel-producing areas, and one that has been often described as one with the Nation's most acute water problems. The valley is part of the fourth-ranking steel producing district, the one which is smallest geographically of any of the leading steel districts, where more than 8 percent of the Nation's steel, so vital in any war effort and so important for maintaining national prosperity, is produced. Its welfare and prosperity depends upon water—on having enough water at the right times and not too much water at other times.

The Mahoning Valley is not really asking for a new reservoir project. It is merely asking now that this project be substituted for one—the proposed Eagle Creek Reservoir—which Congress has already seen fit to authorize under the Comprehensive Flood Control Act of 1938. Because of some rather extensive and expensive deposits of valuable silica sand in the proposed Eagle Creek Reservoir area, it is considered advantageous to substitute this project, which may be built for about half the cost but would provide substantially the same amount of benefits and protection as would the Eagle Creek project.

During World War II, it was found advisable as valuable to the national war effort to build in the Mahoning River Valley Basin two other reservoirs which had been authorized in the 1938 Flood Control Act. These are the Berlin Reservoir and the Mosquito Creek Reservoir. The valley has two other major non-Federal reservoirs—Meander Creek Reservoir, which serves as the domestic water supply for the cities of Youngstown and Niles and therefore provides relatively little low flow and flood-control benefits; and Milton Reservoir, which is owned by the city of Youngstown, is on the upper Mahoning River, just below Berlin Reservoir, and is operated by the Army Engineers, under agreement with the city, as a low flow and flood-control reservoir.

Mosquito Creek and Berlin Reservoirs already have proved themsleves to be wise and prudent investments of the public funds. They helped materially in making it possible for the Mahoning Valley steel mills to produce more steel, relatively inexpensively, to help to win World War II, and, since the war, to provide more steel to lift the national economy to its present high levels. They helped also to insure that these steel mills were not at the mercy of floods and consequently losses of production.

Unfortunately, this rich river valley, which yields the Federal Government hundreds of millions of dollars annually in taxes, still does not have enough protection. Its potential growth is stifled and consequently the growth of its tax revenues also suffer. It suffers from the curse of too much water at times, not enough at others. Its present reservoirs help to conserve the waters in times of too much for the periods when it has not enough. It still needs more.

Last year, the valley suffered from acute drought which seriously impaired the ability of its steel mills and electric powerplants, representing investments of billions of dollars to operate economically and produce steel at a sufficient rate for both the national defense and to meet the demands of the civilian economy. This spring that same valley is suffering from an oversupply of water and is being forced to dump large quantities of valuable water which will be sorely

needed later this year. This foolish waste is caused by a shortage of sufficient reservoir space.

I herewith quote from an article which appeared in the Youngstown Vindicator dated May 14, 1956, under the headline "Must Dump 15 Billion Gallons of Water Here."

"MUST DUMP 15 BILLION GALLONS OF WATER HERE

"The soggy Mahoning Valley, taking stock of its water-supply problems, today found itself with such a big surplus of water that a major share of its flood-control capacity has been used up and it must dump at least 15 billion gallons which may be urgently needed later by industry, homes, and agriculture.

"The current water problem is considered a major argument for construction of the proposed West Branch Reservoir, both as a low flow and flood-control project. Representative Michael J. Kirwan is working to get authorization for the project in the current congressional session.

"One tragedy of Mother Nature's overgenerosity this season has been a serious delay in spring plowing and planting on eastern Ohio-western Pennsylvania farms.

"The United States Army Corps of Engineers at Pittsburgh reported today that rainfall in the Mahoning River Valley above the flood-low flow control reservoirs so far in May has been 300 percent above normal and for the last 3½ months has been 150 percent above normal. The engineers reported 17½ inches of rain fell in the last 3½ months.

"Tom L. Reilly, chief hydrologist in the Pittsburgh engineer office, reported this morning that Berlin and Milton Reservoirs contained 10.2 billion gallons, and Mosquito Creek Reservoir 2.7 billion, above normal schedules. Meander Reservoir has a foot of water going over the flashboards atop the spillway, and so has one to two billion gallons that will be wasted. The flow over the flashboards for a time was 2½ feet, said Luther T. Fawcett, chief engineer and secretary of the Mahoning Valley Sanitary District. The reservoir holds 10 billion gallons, but the flashboards add another billion to its capacity.

"BAD FLOOD AVERTED

"Reilly today said that 81 percent of the Milton-Berlin capacity reserved for flood control at this time was filled, and that without the reservoir system, the Mahoning Valley no doubt would have had a serious flood during the last 2 or 3 days. As it was, many fields and even some roads have been flooded. Reilly reported that Berlin this morning contained 28 billion gallons. Milton 8.3 billion, and Mosquito Creek Reservoir 29.6 billion. Milton is releasing 339 million gallons a day, and Mosquito 61 million.

"He reported the Mahoning River's flow at Leavittsburg is at the rate of 4,650 million gallons a day and at Youngstown 7,750 million.

"Reilly reported that the river crested at 10 p. m. Sunday at Warren at 7.1 feet over the waterworks dam, and receded to 6.25 feet this morning. The Youngstown crest was 13.3 feet above benchmarks during the night and receded to 12.06 feet this morning.

"Reilly said that engineers will have to fill Lake Milton and spill some water over the spillway for the next 3 or 4 days because of the limited outlet capacity of the dam's works."

The Mahoning River Basin is located in Mahoning, Trumball, and Portage Counties in eastern Ohio, and Lawrence County in western Pennsylvania. The stream joins with the Shenango River just south of New Castle, Pa., to form the Beaver River. The Mahoning's principal tributaries are West Branch, Eagle Creek, Meander Creek, and Mosquito Creek. The latter two are already dammed and controlled, as are the upper reaches of the main stream. The United States Army Corps of Engineers have stated that the two remaining sources of control are in West Branch and Eagle Creek.

The river drains 599 square miles at Warren, 899 square miles at Youngstown, and 1,129 square miles at the mouth. The average stream slope is 2.2 feet per mile from Milton Dam to Warren, and 2.6 feet per mile from Warren to the mouth. The river's width varies from about 150 feet above Warren to 200 feet at the mouth.

The Mahoning River Valley is densely populated, particularly from Warren to the Ohio-Pennsylvania State line. The high concentrations of population are adjacent to the heavy industrial and commercial development on both banks

of the river. The population of the principal cities and towns adjacent to the river, estimated for 1955, are:

City or town:	*Population*
Ravenna, Ohio	9,857
Newton Falls, Ohio	4,451
Leavittsburg, Ohio	2,533
Warren, Ohio	49,856
Niles, Ohio	16,773
McDonald, Ohio	1,858
Girard, Ohio	10,113
Youngstown, Ohio	168,330
Campbell, Ohio	12,882
Struthers, Ohio	11,992
Lowellville, Ohio	2,227
New Castle, Pa	48,834
Counties:	
Trumbull	168,700
Portage	70,220
Mahoning	263,900

The Youngstown district, which includes the Mahoning Valley and the Shenango Valley, ranks as the Nation's fourth largest in steel-producing capacity. It provides direct employment in iron and steel manufacture of fabrication of approximately 80,000 workmen. In addition another 40,000 are employed in transportation or service industries, retail stores or other employing industries.

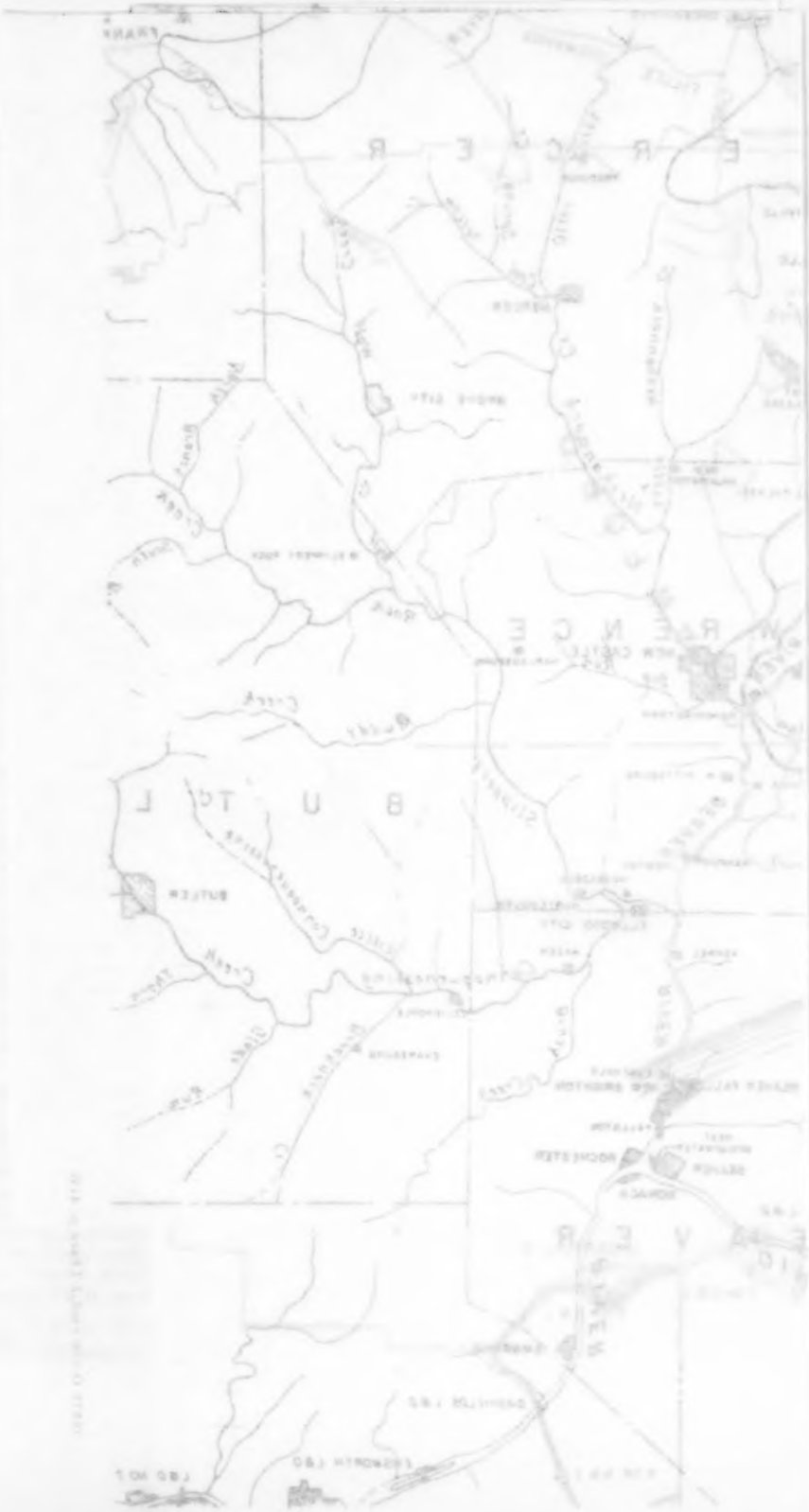
As of January 1, 1956, according to the American Iron & Steel Institute records, the district had 11,378,380 net tons of steel ingot producing capacity, or 8.9 percent of the Nation's 128,363,000 tons of capacity. This capacity included 78 open hearth furnaces, with a rated capacity of 8,999,000 tons; 6 Bessemer converters, rated at 1,689,000 tons, and 9 electric furnaces, rated at 690,380 tons. The district also had 25 blast furnaces with a combined rated capacity of 4,018,000 tons, out of the Nation's 261 furnaces with a rated capacity of 85,485,230 tons. It has 4 coke plants with a rated capacity of 4,018,000 tons of the Nation's 71,508,400 tons of coking capacity.

The Mahoning Valley, because of its shortage of reservoir capacity, makes probably the most intensive use of every available gallon of water of any place in the United States; it represents probably the largest investment of private funds most vulnerable to flash floods.

A United States Bureau of the Census report for 1953 (published in the American Iron & Steel Institute May 1955 issue of Steel Facts) reports that the American steel industry in 1953 used 3,108 billion gallons of water in its various processes; and that about 55 percent was recirculated back into surface water sources.

It reported that more than 57 tons of water (13,757 gallons) were used nationally per ton of pig iron production. Youngstown Sheet & Tube Co., one of the principal Mahoning Valley steel producers, reports that in 1955 it pumped 54,000 gallons of water per ton of pig iron produced in its Mahoning Valley plants; but at its Campbell works, which is one of the last users on the Mahoning River, it used 61,000 gallons per ton of pig iron, or nearly 4 times the national average. This much higher use of water is due to the high temperatures of the water at the Campbell works, thus requiring the greater quantities of water to achieve the same cooling result.

Mahoning Valley industries which pump water from the Mahoning River for cooling and other purposes (including three Ohio Edison Co. electric power generating plants at Warren, Niles, and Lowellville) report they would require an average daily water supply of 1.3 billion gallons if they were to use the water only once. However, the United States Army Corps of Engineers which operates the reservoirs try to maintain a minimum flow of 178 million gallons per day in the river. At this minimum period of flow, each gallon of water must be pumped over and over again 7 to 8 times in approximately a 20-mile flow. The Army engineers had a few years ago set 95 degrees as the maximum desirable temperature of river water at the Campbell works intake; they were unable to meet that maximum and last year boosted it to 105 degrees. That increase in temperatures has cost the industries hundreds of thousands of dollars annually in increased fuel costs, maintenance, and otherwise lowered efficiency.



LAKE ERIE
ASHTABULA
ASHTABULA RIVER
GENEVA
MADISON
FAIRPORT HARBOR
PAINESVILLE
LAKE
GRAND RIVER
ASHTABULA
EAGLESVILLE
ROCK CREEK
Rock Creek
RIVER
GEAUGA
WINDSOR
ORWELL
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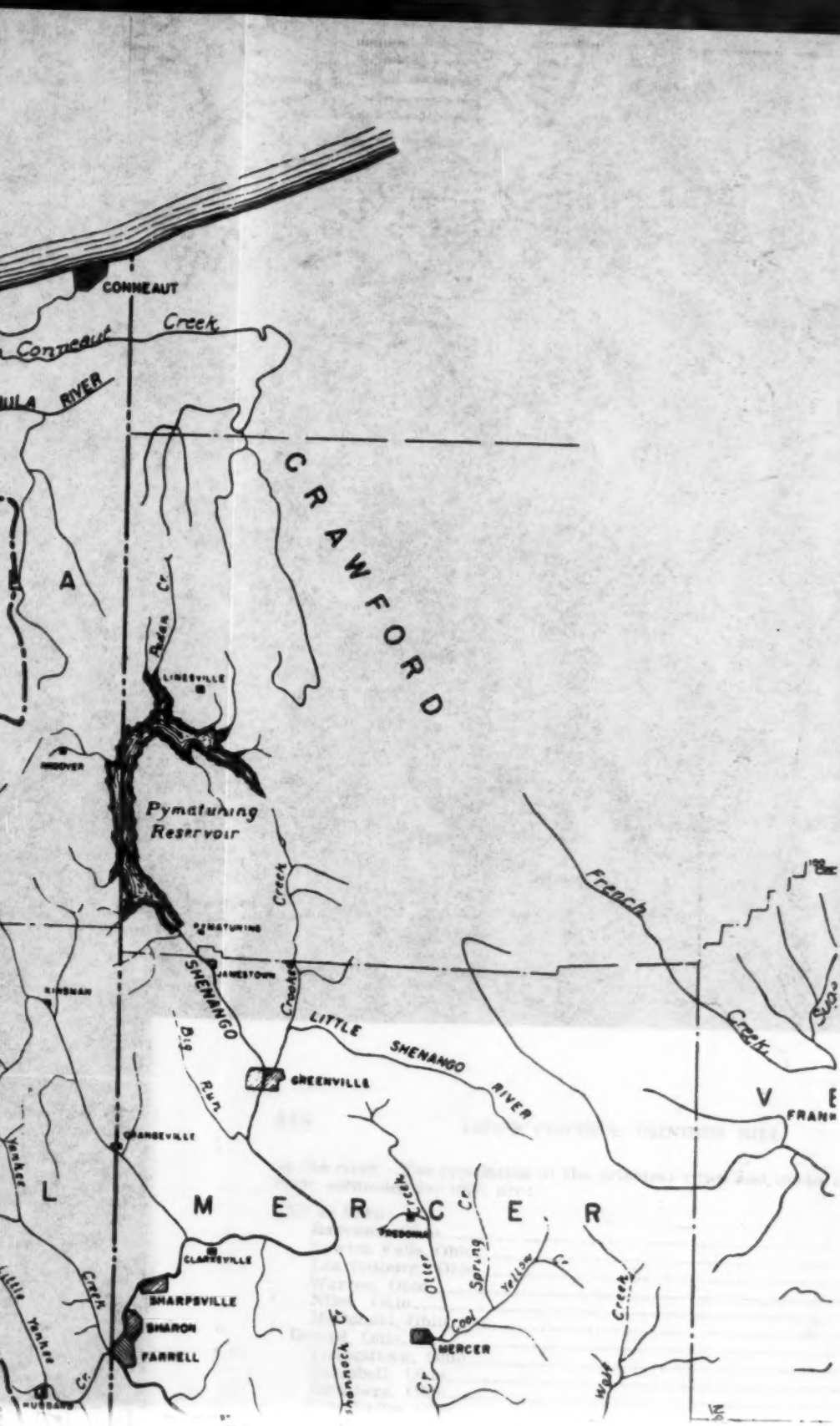
HUDSON
NORTH BLOOMFIELD
MESOPOTAMIA
FARMINGTON
Mud Cr.
NORTH BRISTOL
Cedar Creek
WEST FARMINGTON
GRAND
Mosquito Creek Reservoir
Mud Run
TRUMBULL
CORTLAND
Yankee
Eagle
GARRETTSVILLE
Creek
WARREN
LEAVITTSBURG
Mosquito Cr.
Little Yankee
PORTAGE
NEWTON FALLS
HONING RIVER
RAVENNA
Branch
NILES
McDONALD
HUBBARD
WEST FARMINGTON
GRAND
Mosquito Creek Reservoir


CONNEAUT
Conneaut Creek
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A
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SHENANGO
Creek
LITTLE SHENANGO RIVER
French Creek
GREENVILLE
Big Run
L
M E R C E R
V
FRANK
Yankee
Creek
SHARPSVILLE
SHARON
FARRELL
Shannock Cr
Otter Cr
Spring Cr
Cool Cr
MERCER
Wolf Creek
Yellow
Creek
Yankee
Cr.

PORTAGE
Branch
RAVENNA
WEST BRANCH
West
Milton Reservoir
Hale
Deer
Creek
LIBERTY
Berlin Reservoir
ALLIANCE
Beech
Cr
MAHONING
NEWTON FALLS
WEST FARMINGTON
GRAND
Mud Run
Eagle
GARRETTSVILLE
PHELPS
Creek
RIVER
LEAVITTSBURG
WARREN
Mosquito Cr
Mosquito Creek Reservoir
CORTLAND
Yankee
Little Yankee
TRUMBULL
MILES
McDONALD
GIRARD
HUBBARD
PRICETOWN
MINERAL RIDGE
Duck
Meander Creek Reservoir
YOUNGSTOWN
CAMPBELL
STRUTHERS
LOWELLVILLE
Meander Cr
BERLIN CENTER
N BENTON
MAHONING
Mill Cr
Yellow
SALEM
LEETONIA
STARK
COLUMBIANA
E LIVERPOOL

GREENVILLE
FRANK
MERCER
SHARPSVILLE
SHARON
FARRELL
HUBBARD
WEST MIDDLESEX
GROVE CITY
MERCER
YOUNGSTOWN
CAMPBELL
MAHONING
LOWELLVILLE
MILLSVILLE
EDINBURG
BESSEMER
COVERT
PULASKI
NEW WILMINGTON
SLIPPERY ROCK
LAWRENCE
NEW CASTLE
HARLANSBURG
MAHONINGTOWN
HICKORY
MORAVIA
W. PITTSBURG
BEAVER
NEWTON
NASHVILLE
PORTERVILLE
ELLWOOD CITY
KOPPEL
HAZEN
BUTLER
CONNOQUENESSING
EVANSBURG
BREAKNECK
GLADE RUN
THORN
BEAVER FALLS
EASTVALE
NEW BRIGHTON
FALLSTON
WEST BRIDGEWATER
BEAVER
ROCHESTER
MONACA
MONTGOMERY L&D
LIVERPOOL
L&D NO 7
L&D NO 8
L&D NO 9
AMBRIDGE
DASHIELDS L&D
EMSWORTH L&D
PENNSYLVANIA
OHIO
BUTLER
Neshannock Cr
Little Neshannock Cr
Otter Cr
Cool Spring Cr
Yellow Cr
Wolf Creek
Little Yankee Cr
Yankee Cr
Big Run
Hickory Run
Muddy Creek
Slippery Rock Cr
Scrubgrass Cr
Little Connoquenessing Creek
Connoquenessing Creek
Brush Creek
Beaver River
Ohio River

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The industries, besides Ohio Edison's powerplants, which pump the river water, include Standard Steel Spring Co. and Ideal Foundry at Newton Falls; Republic Steel Corp. at Warren, Niles, and Youngstown; United States Steel Corp. at McDonald and Youngstown; Youngstown Sheet & Tube Co. at Brier Hill and Campbell works; Pittsburgh Coke & Chemical Corp., at Struthers; Sharon Steel Corp., at Lowellville.

The United States Army district engineer at Pittsburgh recently stated that construction of the West Branch Reservior would permit increasing the minimum flow from 178 million gallons to 210 million gallons and unquestionably would permit lowering the maximum temperature to 95°.

The West Branch Reservoir will also help substantially in aiding in development of domestic water supplies, which are sorely inadequate, by making it possible to use some present reservoir capacity for domestic uses.

These river developments and their benefits already have contributed enormously to the economic growth and welfare of the Mahoning Valley and will continue to contribute.

A study of official records shows that in 1937 the Youngstown district had 7,549,691 tons or 10.82 percent of the Nation's steel ingot capacity of 69,775,334 tons, a present increase of 3,828,689 tons; and January 1, 1944, just after completion of the Berlin and Mosquito Creek Reservoirs, it had 9,989,800 net tons or 10.41 percent of the Nation's total.

Aside from the steel industry, there are other major expansions in the Mahoning Valley. The aluminum fabricating and processing industry, which has grown here principally since World War II, now is estimated to employ about 7,500, which includes about 75 separate firms. This industry is a large consumer of domestic water. Other firms which have come into the area since the war include the Chrysler Corp. with a stamping plant, Sherwin-Williams Co., Harvell Manufacturing Co., Swedlow Plastics Co., International Paper, Globe Union, American Brake Co., Ohio Boxboard, Kaiser Chemical & Aluminum, and many others.

The steel industry will shortly become even more dependent on the river because of increases in steel capacity. Republic Steel is working on a 350,000-ton expansion at its Warren plant and a 75,000-ton expansion at its Youngstown works. Youngstown Sheet & Tube is planning a 400,000-ton expansion at Youngstown. United States Steel no doubt will get a large steel expansion from its sintering plant, now under construction, and likely will build a byproducts coke plant which will require enormous quantities of additional water.

Other industrial expension here is also dependent upon increasing domestic water supplies in Youngstown, Niles, and Warren and other communities.

General Motors Corp.'s now Lordstown plant will require 2 to 2½ million gallons daily from Niles, and some others under consideration now will require another 2 to 3 million gallons daily.

The Mahoning Valley's present reservoir facilities sonsist of—

Meander Reservoir on Meander Creek, which has an impounding capacity of 10 billion gallons and a rated safe daily yield of the driest cycle of years of 30 million gallons a day. This frequently has been exceeded and the district, under a contract with the Army engineers, has been authorized to take up to 34 mililon gallons daily from Berlin Reservoir, for which it will pay $34 per million for what it takes.

Mosquito Creek Reservoir, a 36-billion-gallon reservoir, but which has a very small drainage area (about 97 square miles). Warren has been authorized to pump up to 16 million gallons daily for a domestic supply but now is trying to increase this to 26 million gallons daily.

Berlin, 27 billion gallons storage capacity.

Milton, 9 million gallons storage capacity.

I am therefore asking your consideration for authorization of the West Branch project, as a substitute for the already authorized Eagle Creek project, to help to protect this major industrial district against future devastating floods and to help to insure its future industrial growth, thus safeguarding its future contribution to the national economy and national defense.

Mr. DAVIS. Are there any other questions?

(No response.)

Mr. DAVIS. I assume there are no questions you want to ask General Itschner in connection with this matter. If not, we thank you very much, General, and Mr. Kirwan.

The committee will adjourn.

(Whereupon, at 12:10 the subcommittee adjourned subject to the call of the chair.)

FLOOD CONTROL OMNIBUS BILL

MONDAY, MAY 28, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to call, in room 1302, New House Office Building, at 10:05 a. m., Hon. Clifford Davis, chairman of the subcommittee, presiding.

Mr. DAVIS. The committee will be in order.

The Subcommittee on Flood Control is meeting this morning for the purpose of considering certain flood control review resolutions. We will hear from Major Reed on one matter and will hear from Mr. Dodd, of Connecticut, in the interests of H. R. 8121, which has to do with the Cold River Reservoir in Cold River, N. H., and the Littleville Reservoir, Middle Branch of the Westfield River, in Massachusetts.

(Bill H. R. 8121 follows:)

[H. R. 8121, 84th Cong., 2d sess.]

A BILL To authorize the construction of additional flood-control reservoirs in the Connecticut River Basin

Be it enacted by the Senate nad House of Representatives of the United States of America in Congress assembled, That the plan for the control of floods in the Connecticut River Basin, approved by the Act of June 22, 1936 (Public Law Numbered 738, Seventy-fourth Congress), as amended and supplemented, is hereby modified to provide for the construction, under the direction of the Secretary of the Army and the supervision of the Chief of Engineers, of the following reservoirs, substantially in accordance with the plans on file in the Office of the Chief of Engineers, and the authorization for said basin is increased accordingly:

Cold River Reservoir, Cold River, New Hampshire, at an estimated cost of $7,273,000; and

Littleville Reservoir, Middle Branch of Westfield River, Massachusetts, at an estimated cost of $4,030,000.

In view of the fact that Mr. Dodd has his daughter graduating here in less than an hour, we will hear from him first.

Mr. Dodd, will you come around? Mr. Dodd is our colleague in the House, and we want you to make such statement as you care to make, and your formal statement may be made a part of the record at this point.

STATEMENT OF HON. THOMAS J. DODD, MEMBER OF CONGRESS FROM THE STATE OF CONNECTICUT

Mr. DODD. Thank you very much, Mr. Chairman and members of the committee.

I am grateful to you for your courtesy in allowing me to testify early, and I am grateful to my colleague, Mr. Reed, for permitting me

to go ahead of him. I know by all the rules of seniority Mr. Reed should be on before I am, but I explained to him that I do have a daughter graduating from school here this morning and I would like to attend the ceremonies at 11 a. m.

I am very grateful to you for calling H. R. 8121 up for hearing. I can say in a very few words really all I have to say about this proposal.

This committee knows so much about floods and flood damage, particularly in New England and our area, that I feel it would be presumptuous of me to tell you very much about it.

The engineers, with whom I have talked about this bill, tell me that these two projects really should be carried out and that had the rains or the floods of last August and October been geographically of a little different nature, I think we might have suffered a terrible disaster by way of the Connecticut River overflowing and doing tremendous damage in the city of Hartford. We do have big dikes there that have helped us a lot but I think it has always been a source of worry to many well informed people in the area that they probably would not be adequate if heavy rains or other causes of floods got into these areas where these projects are necessary, and if the waters came tearing down the Connecticut River. I think half of the city of Hartford might be lost.

For that reason I urge the members of this committee to look favorably upon these projects and upon this bill. I think if we can build these two projects we will be relatively certain that another great disaster does not attend us in that area.

I think that is about the case for this bill, but I would like to submit the formal statement which I have drawn up, Mr. Chairman, with respect to this bill.

Mr. DAVIS. Without objection, your statement will be inserted in the record.

(The statement referred to is as follows:)

STATEMENT OF THOMAS J. DODD

Mr. Chairman, I am aware that the members of this committee are thoroughly familiar with the varied aspects of flood control, and indeed have a much more comprehensive grasp of the complexities of the problem than I. As a layman, however, I would like to emphasize one point. The feasibility of flood control methods is primarily a question of engineering technique, but it must also be thought of in terms of human suffering.

I think we are all familiar with the devastation left in the wake of last year's New England floods. The economic loss, although of staggering proportions, tells only a part of the real story. Many people of my district and State were left destitute, and in many instances lost even the roof over their heads. It is by no means an exaggeration to compare the havoc of these floods to some of the more heavily bombed European cities during the last war. The nature of a disaster is usually academic to its victim. The only really important issue is whether or not any human agency can eliminate or reduce the effect of these disasters. As yet, we cannot completely control nature, but by a program of really adequate flood control we can at least minimize the effects of these disasters upon our people.

The need of flood control is not unique to any geographical or political division of my State, or of New England. It is an interlocking problem, in that conditions in the northeastern portion of the country can precipitate floods in my District or elsewhere in New England. I am confident that my colleagues from other northeastern constituencies join with me in urging your approval of this bill to authorize the construction of additional flood-control reservoirs in the Connecticut River Basin.

The argument can be advanced that we cannot afford to expend the approximate $7,273,000 for the Cold River Reservoir, and the needed amount for the Littleville Reservoir near Westfield, Mass. To this I can only say that we simply cannot afford not to construct these needed reservoirs. The economy of New England, already under attack from different directions, cannot be expected to absorb the tremendous losses that would occur should we have a repetition of the floods of 1955. I know that in my own district there were factories destroyed by these floods that in all likelihood will never be replaced. This results not only in the initial loss of revenue producing property, but also the loss of jobs and incomes for numerous families. When any section of our country suffers severe economic depression, this depression is reflected throughout the Nation. The old cliché, an ounce of prevention is worth a pound of cure, still makes a lot of sense. If this, and other flood-control projects are constructed we may well be saving millions of dollars in damage by spending a relatively small amount. I think, too, that it is even more important to think of flood control in terms of people, who have a right to look to their Government for protection that can be provided agains catastrophe.

No man can accurately predict the course of nature, and it would be foolish to simply close our eyes and minds to the very real possibility that we may suffer a reoccurence of the 1955 floods that devastated parts of New England. We cannot expect people to live in fear, never being able to plan on reasonable safety from the havoc of floods, and never knowing when flood waters may rise and wash away the hard work of a lifetime.

As the represenative from Connecticut's First Congressional District, I urge the members of this committee to support these vital projects. I am sure that this committee is well aware of the fact that Congressmen from my State have traditionally been sympathetic to projects of this type for other regions of the Nation. Many of these projects were of much greater dimension than either the Cold River Reservoir or the Littleville Reservoir, now under discussion.

The people of Connecticut were grateful for the help received from all over the country after the floods of 1955. It was a heartwarming example of the American public pitching in to help when disaster occurs. I know that the members of this commitee are no less sympathetic, and I earnestly request your favorable consideration of these projects.

These reservoirs at Cold River, N. H., and Littleville, Mass., are the only two in the plan of the Army Corps of Engineers which lack authorization, even though they were made prior to the floods.

Mr. DAVIS. Our usual policy is to hear from the Corps of Engineers first. We took you out of order this morning because of the urgency of your situation.

Mr. DODD. I am grateful to you for that.

Mr. DAVIS. Do any of the members care to ask Mr. Dodd any questions at this point, or would they rather wait for the engineers to appear?

I thank you very much.

Mr. DODD. Thank you, sir.

Mr. DAVIS. Who will represent the Corps of Engineers on this project this morning?

Mr. BRENNAN. Colonel Penney, sir.

Mr. DAVIS. Fine. Colonel Penney, come around.

STATEMENT OF COL. H. W. PENNEY, CORPS OF ENGINEERS—Resumed

Colonel PENNEY. Mr. Chairman and members of the committee, the purpose of H. R. 8121 is to modify the plan for control of floods in the Connecticut River Basin to provide for the construction of the Cold River Reservoir on Cold River in New Hampshire and the Littleville Dam and Reservoir on the middle branch of the Westfield River in Massachusetts.

The Cold River and Littleville Reservoirs were considered favorably in the report of the New England-New York Interagency Committee. In addition to that special study, a resolution by the Senate Public Works Committee adopted on the 15th of September 1955, authorized the Corps of Engineers to make studies of the New England streams in the light of the hurricane floods of 1955 in the interests of flood control.

With your permission, Mr. Chairman, I will treat these two projects separately, in view of the fact that they have a somewhat different status as to the study.

First with respect to the Littleville Reservoir. Pursuant to the authority of the Senate resolution, the New England division engineer has just submitted an interim survey report to the Chief of Engineers on the Littleville Dam and Reservoir. It has not yet been referred to the Board of Engineers for Rivers and Harbors or reviewed by the Chief of Engineers, nor has it been commented on by the Federal agencies.

However, from the report I can present the following data: The Westfield River is one of the major flood-producing tributaries of the Connecticut River. It rises in western Massachusetts and flows about 57 miles south and southeast, entering the Connecticut River at West Springfield. The middle branch, which is this pink area, the drainage basin, is one of the major tributaries of the Westfield River, and perhaps it can be better seen on this larger-scale map. This is the main stem of the Westfield River. The middle branch comes in here and there are other tributaries below.

The authorized flood-control project for the Connecticut River Basin, which was authorized by the Flood Control Acts of 1936 and 1938, and amended by subsequent flood-control acts, authorizes 21 reservoirs shown on this map, as well as 10 local protection projects. Five of the reservoirs have been completed and the local protection projects have been completed. One of the five is the Knightville Dam, which is located on the main stem of the Westfield River and controls the upper Westfield River, but as you can see, it does not control the tributaries, because this tributary, for example, the middle branch, enters the Westfield River below this dam.

Also completed is a local protection project at West Springfield down at the confluence of the Westfield and Connecticut Rivers.

The problem in this Westfield Basin is that it experiences severe floods caused by heavy rains, snow melts, and the very steep slopes in the area, which makes the runoff very rapid. Damage is severe along this lower main stem of the Westfield River and where there are located many mills and industrial plants and commercial and residential areas, as well as two United States highways and a main line railroad.

Six major floods occurred since 1927 in the Westfield Basin, causing loss of life as well as disruption of the economy and heavy damage there. There are also more frequent minor floods.

The flood of 1938, which was the flood of record until the hurricane flood of 1955, had damages of about $1,400,000 occurring in the Westfield Basin. That was downstream from the sites of these dams which

were not yet constructed. If that flood recurred today without reservoir control on the Westfield it would cause about $2.6 million damage. Knightville Dam was completed in 1941. As a result of its action in controlling the upper Westfield River during the hurricane flood of 1955, damages were appreciably reduced down here. Nevertheless, because of the contribution of the tributaries, the greatest damage in history occurred on the lower Westfield Basin. It was estimated at about $5.1 million. There were 800 residences and about 70 commercial establishments damaged. Ten buildings were completely destroyed and highways were gutted. Railroad tracks and beds were wiped away and two bridges were destroyed.

The average annual damages in this basin are about $415,000, with no reservoir control.

Major floods also occurred on the Connecticut River in 1936 and 1938, causing $35 million and $8 million worth of damages respectively. Recurrence of those floods without the existing projects would cause $134 million and $90 million worth of damages respectively. So additional reservoir storage is needed in the upper Connecticut Basin to control the very major floods to an elevation which will be below the height of the existing flood walls and dikes which have been constructed, so as to prevent them from overtopping.

Construction of a dam on the middle branch of the Westfield River would reduce the contribution of the Westfield to the lower Connecticut River floods and damages caused by it. The proposed solution in the Westfield Basin is the construction of additional reservoir storage plus possibly local protection projects at populated centers along this lower river. These will be investigated further in future studies.

This interim report which is submitted by the division engineer recommends the construction of a flood-control dam and reservoir at Littleville, 1 mile upstream from the mouth of the middle branch of the Westfield River. It would be about 150 feet high, 1,300 feet long, and have a reservoir capacity of 23,600 acre-feet for flood control.

The total estimated cost to the Federal Government would be $5,090,000.

The benefit-cost ratio as computed by the division engineer in the report is 1.7 to 1, based on 1956 prices.

The Commonwealth of Massachusetts has concurred in the project by letter to the division engineer of February 13, 1956. The official views of the Federal agencies have not yet been obtained. The report, of course, has not yet been referred to the Bureau of the Budget.

With respect to this report of the division engineer, a preliminary review in the office of the Chief of Engineers reveals that it does not have sufficient data supporting it to evaluate the benefit-cost ratio reported. A question exists as to the distribution of benefits between this project and the local protection projects downstream; that is, whether a reasonable distribution of benefits has been made. Further analysis of the economic justification therefor will have to be made during the review by the Rivers and Harbors Board. Data is being assembled for this purpose by the division engineer, and preliminary indications from that data indicate that the benefit-cost ratio reported will be reduced but will probably be above unity.

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With respect to the Cold River project, the Cold River project will be considered in the review report to be prepared by the division engineer on New England streams. It has not yet been studied other than the consideration given to it in the resources review in the New England-New York Interagency Committee report. In that report the Cold River site was considered, which has a drainage area of 101 square miles in New Hampshire, and the dam site considered was on the Cold River about nine-tenths of a mile above its mouth at the Connecticut River near Bellows Falls, Vt.

The project would consist of an earth-fill structure about 1,500 feet long and 190 feet high, and would have a capacity of 43,200 acre-feet for flood control, equivalent to about 8 inches of runoff from the Cold River drainage area. The project would require the acquisition of about 800 acres of land in the reservoir area, including some buildings, and there would be minor highway and utility relocations.

The total estimated first cost at present prices is approximately $10,500,000. No report being available and studies not having progressed to that point, no benefit-cost ratio can be quoted at this time on this project. Therefore, with respect to the Cold River report, it is suggested that the committee may wish to defer action on this project until a report is submitted.

Mr. DAVIS. At this stage would you recommend the second one, that Littleville Dam?

Colonel PENNEY. Mr. Chairman, the division engineer recommended it, but we are not in a position to recommend the project. It has not, as I said, been reviewed by the Rivers and Harbors Board, but I have quoted to you the data from the report by the division engineer. That is essentially all I have. I will be glad to try to answer any questions you may have.

Mr. DAVIS. Are there any questions?

(No response.)

Mr. DAVIS. Statement of John D. Heselton on H. R. 8132 will follow here.

(The statement of Mr. Heselton follows:)

STATEMENT OF HON. JOHN W. HESELTON, FIRST CONGRESSIONAL DISTRICT OF MASSACHUSETTS

Mr. Chairman and gentlemen, I appreciate your courtesy in permitting me to make this statement with reference to the construction of the so-called Littleville Reservoir, which would be located on the Middle Branch of the Westfield River in the vicinity of Chester, Mass.

As the committee knows, on January 5, 1956, I filed H. R. 8132, which would authorize the preparation of detailed plans for this reservoir.

The committee is also fully informed as to the serious consequences of the disastrous floods of August and October 1955 in certain parts of the northeastern section of this country, including the Commonwealth of Massachusetts. Communities, utilities, and individuals in Massachusetts and Connecticut in the region affected by the flow of water from the Westfield River suffered substantial damage as a result of these floods.

Following their occurrence I requested advice from the New England division of the United States Corps of Engineers as to the estimated reduction in damage during these floods, if the Littleville project had been constructed and in operation on these dates. The estimate furnished to me was a total reduction of $8,080,000. Their report to me is as follows:

August 1955, along Westfield River in Massachusetts	$2,500,000
October 1955, along Westfield River at Westfield, Mass	115,000
Total	2,615,000
August 1955, along Connecticut River below entrance of Westfield River in Massachusetts	1,735,000
October 1955, along Connecticut River below entrance of Westfield River in Massachusetts	50,000
Total	1,785,000
August 1955, along Connecticut River in Connecticut	3,265,000
October 1955, along Connecticut River in Connecticut	415,000
Total	3,680,000
Or, a total estimated reduction in—	
Massachusetts	4,400,000
Connecticut	3,680,000
Total	8,080,000

The estimated construction cost of this project, at the 1955 level, is $5,500,000.

The estimated annual cost of operation and maintenance after construction is approximately $25,000.

There are three flood-control dams and reservoirs located in Massachusetts on tributaries of the Connecticut River. Each contributed significantly during these two floods of 1955 and in previous floods or periods of high water.

They are Birch Hill and Tully on the Millers River, and Knightville on the North Branch of the Westfield River.

The experience during the flood of August 1955 so far as the Knightville project is concerned is significant, since it is located on 1 of the 3 branches of the Westfield River.

The New England division of the United States Corps of Engineers advised me that in the August 1955 flood the Knightville Reservoir reduced the flow at Westfield from an estimated peak of 75,000 cubic feet per second to an experienced peak of 61,000 cubic feet per second, or a stage reduction of about 4 feet.

It is estimated that, if the Littleville project had been constructed and in operation, the flow would have been reduced further from an experienced 61,000 cubic feet per second to approximately 42,000 cubic feet per second with a corresponding stage reduction of about 5 feet.

A summary of regulation at the Knightville Reservoir reported to me by the division contains the following information:

Date	Maximum stage, feet	Storage utilized, acre-feet	Percent of total
August 1955	105.0	28,200	57
October 1955	127.8	47,200	96

That report shows that the reservoir has been operated over 40 times since its completion in December 1941.

The drainage area of the Knightville Dam and Reservoir is 162 square miles; of the proposed Littleville project would be 53 square miles.

The reservoir capacity of the Knightville Dam and Reservoir is 49,000 acre-feet; of the proposed Littleville project would be 23,200 acre-feet.

On January 17, 1956, the planning division of the department of commerce in the State of Massachusetts held a public hearing on this project. Subsequently, it recommended a concurrence by the Commonwealth of Massachusetts in the construction of the project and on February 13, 1956, Hon. Christian A. Herter, Governor of the Commonwealth of Massachusetts, by letter addressed to Brig.

Gen. Robert J. Fleming, Jr., USA, Corps of Engineers, filed the formal concurrence of the Commonwealth of Massachusetts. I am attaching a certified copy of that letter at the conclusion of this statement. It is marked "Exhibit A."

While I am certain that you, Mr. Chairman, and the committee will have available all necessary detail with reference to this project from the Corps of Engineers, I do want to conclude with five brief paragraphs which, I believe, summarize the background as to this project and the urgent necessity of initiating it at the earliest possible moment.

Damaging floods have been experienced in the Connecticut River and its tributaries since the establishment of the first settlement. Available information includes descriptive references on floods back to 1639, and sufficient data at various locations to permit an estimate of outstanding flood heights since 1683.

When the national policy on flood control was established in the Flood Control Act approved June 22, 1936, a system of 10 reservoirs was authorized for the control of floods in the Connecticut River Basin. At the present time, there are five completed flood-control reservoirs in the Connecticut River Basin.

There is a good reason for the previous delay in the construction of other authorized reservoirs. Many of the sites are located in Vermont and New Hampshire, which provide benefits for urban areas in Connecticut and Massachusetts. The New England States sought legislation which would authorize an interstate compact through which the States of Vermont and New Hampshire would be reimbursed by the States of Connecticut and Massachusetts for certain losses, including loss of taxes. This legislation was rejected in 1938. It was not until the enactment of Public Law 52, 83d Congress, approved June 6, 1955, that Congress granted its consent and approval to the Connecticut River flood-control compact. A great deal has been accomplished thus far under that compact.

On April 13, 1956, during the hearings before the House Subcommittee on Public Works, a brief but significant reference occurred pointing up the merits of this project and I am attaching an excerpt from those hearings covering that point. It is marked "Exhibit B."

Subsequent to the floods of August and October 1955, the Massachusetts House delegation appointed a subcommittee on flood prevention and relief, under the chairmanship of our colleague, the gentleman from Massachusetts, Mr. Philbin. I was appointed as a member of that subcommittee. The subcommittee made certain specific recommendations to the Massachusetts House delegation and the Massachusetts House delegation approved these recommendations. I know that a formal report with reference to that has been filed with the subcommittee, but I wish to call attention to the fact that one of the items under "Engineering and planning" is this proposed Littleville project.

EXHIBIT A

THE COMMONWEALTH OF MASSACHUSETTS,
EXECUTIVE DEPARTMENT, STATE HOUSE,
Boston, February 13, 1956.

Brig. Gen. ROBERT J. FLEMING, Jr.,
USA, Corps of Engineers, 857 Commonwealth Avenue, Boston, Mass.

DEAR GENERAL FLEMING: The planning division of the department of commerce, having held a public hearing in Chester on January 17, 1956, in accordance with its powers under section 6 (b), chapter 23A of the General Laws, has recommended the desirability of having the Corps of Engineers construct the Littleville flood-control dam and reservoir in the towns of Huntington and Chester.

It is my understanding that this project is one unit in a comprehensive flood-control plan for the Connecticut River as most recently put forth in the NENYIAC reports. It has not been approved by Congress, but a bill to accomplish that has been submitted and is designated as H. R. 8132 of the 84th Congress, 2d session.

Accordingly, on recommendations of the planning division of the Department of Commerce of the Commonwealth of Massachusetts, as provided by section 6 (b), chapter 23A, of the General Laws, as the official representative of the Commonwealth in matters of navigation and flood control, I should like to affirm the concurrence of the Commonwealth of Massachusetts in the construction of the Littleville flood-control dam and reservoir as proposed by your office to alleviate the damages that have been experienced from past floods.

Copies of this letter are being sent to the Senators and Representatives of Massachusetts and Connecticut and to His Excellency, Abraham J. Ribicoff,

Governor of Connecticut, toward the end that they will be in a position to support H. R. 8132 when it comes up for consideration in the Congress.

Sincerely,

CHRISTIAN A. HERTER.

Certified to be a true copy.

FRANCIS W. TULLY, Jr.,
Press Secretary to the Governor.

MAY 22, 1956.

EXHIBIT B

Excerpt from hearings before Subcommittee on Public Works Appropriations, April 13, 1956, during testimony of Maj. Gen. E. C. Itschner, Assistant Chief of Engineers for Civil Works; Brig. Gen. R. J. Fleming, Jr., division engineer, New England division, Corps of engineers.

LITTLEVILLE RESERVOIR

Mr. BOLAND. What importance does the Corps of Engineers attach to the Littleville Reservoir recommended in the NENYIAC report?

General FLEMING. Speaking personally, the Littleville Reservoir is No. 1 on the hit parade.

Mr. BOLAND. Would the Corps of Engineers be willing, when this project is authorized—and it will be authorized in the omnibus bill by the Public Works Committee—will the Corps of Engineers recommend advanced engineering and design and moneys for it and ask this Congress to appropriate money in fiscal 1957 in a supplemental for that project?

General FLEMING. Again, speaking personally, sir, I would like to see the planning of the Littleville project authorized, whether or not any specific funds are included, because that Littleville project is, in my opinion, one of the most important projects in New England. It is not now authorized and the reason we cannot include it in the budget now is the fact that it is not authorized.

Mr. BOLAND. I am familiar with that. My question is, after it is authorized—and we expect it will be authorized this session—will the Corps of Engineers then come up with a firm recommendation for planning for Littleville Reservoir?

General FLEMING. I can answer your question this way: Had the Littleville Reservoir been authorized, I am convinced it would have been included in this budget.

Mr. BOLAND. If the Littleville Reservoir is authorized this session of Congress, will the Corps of Engineers recommend that some planning money be authorized this session of Congress? It is a simple question. If the Littleville Reservoir is authorized in this session of Congress, will the Corps of Engineers recommend planning money in this session of the Congress for it?

General FLEMING. Do you mean recommend a supplemental, sir?

Mr. BOLAND. Supplemental or even if the authorization comes before we get this appropriation bill into the House. That should be "Yes" or "No". It should be a simple answer.

General FLEMING. Sir, I do not know what the congressional procedure would be on it. I can answer the question this way, sir: That if it were possible to get money for Littleville, I think we would have recommended it. I think we would recommend it.

Mr. BOLAND. It is not possible to get it as long as it is not authorized. I understand that. My question to you and to the Corps of Engineers is: Will the Corps of Engineers recommend planning money for Littleville after it is authorized this session of Congress?

General FLEMING. Yes.

General ITSCHNER. I will say this, sir, that we would recommend to the budget that a supplemental budget request be made, if it is necessary, in order to get some advance engineering design money for Littleville Dam.

Mr. BOLAND. That is all I wanted to know.

[H. R. 8182, 84th Cong., 2d sess.]

A BILL Authorizing the preparation of detailed plans for the Littleville Reservoir on the Middle Branch of the Westfield River in Massachusetts

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the appropriation of funds for the preparation of detailed plans for the Littleville Dam and Reservoir on the Middle Branch of the Westfield River in Massachusetts, is hereby authorized: *Provided*, That the work shall be carried out substantially in accordance with the plan set forth in the report of the New England-New York Inter-Agency Committee, dated March 15, 1955, and on file in the Office of the Chief of Engineers: *Provided further*, That in the preparation of the detailed plans hereby authorized, the Chief of Engineers is authorized and directed to make such modifications as he may deem warranted as a result of the hurricane floods of 1955.

Lake Chautauqua and Chadakoin River, N. Y.

Mr. Davis. Major Reed of New York is here. As the committee recalls, when he presented the Lake Chautauqua project he was careful not to take any particular position. The committee, I think, thought there was quite a difference of opinion up there, but the major, I am sure, is delighted to appear this morning to clear up those differences. I am sure he is personally delighted, and we would like to hear from you, Major.

STATEMENT OF HON. DANIEL A. REED, MEMBER OF CONGRESS FROM THE STATE OF NEW YORK—Resumed

Mr. Reed. Thank you, Mr. Chairman and members of the committee. I deeply appreciate your courtesy in permitting me to straighten this matter out.

As you will recall, on May 1 the different groups came down and they differed. I have presented their views. The people of Jamestown are worried about the Chadakoin River and feared the Army plan would drain it and not give sufficient water for some of their public works. I asked the higher echelon to come down, the mayor of the city and other officers, as well as the chairman of the board of supervisors. They came down and met with General Itschner and his staff. They are perfectly convinced and satisfied that the Army plan is perfect and will not interfere with the outflow of the Chadakoin River.

I have a letter from the mayor, which I would like to make a part of the record, and I will read it to you so you will hear what he has to say:

(See letter below:)

So you can see it accomplished just what I hoped would be accomplished if these people got together. I had absolute faith all the time in General Itschner's proposal for the protection of Chautauqua Lake and the flooded area. I am deeply interested in this and I do hope it will have favorable action on this proposal.

I offer the letter of the mayor in evidence in the hearings.

Mr. Davis. Without objection, it will be made a part of the record at this point.

(The letter referred to is as follows:)

THE CITY OF JAMESTOWN, N. Y.
May 22, 1956.

HON. DANIEL A. REED,
United States Representative,
New House Office Building, Washington, D. C.

DEAR MR. REED: On behalf of the city of Jamestown, I should like to state for the record that the city of Jamestown and the county of Chautauqua are now in full accord on the flood-control plan for Chautauqua Lake and the Chadakoin River as presented by Maj. Gen. E. C. Itschner and his staff of the United States Army Corps of Engineers to a hearing of the Public Works Subcommittee of the United States House of Representatives held at Washington, D. C., on May 1, 1956.

The assurances which we sought concerning the continued maintenance of the Chadakoin River and the Warner Dam as the natural outlet and control of Chautauqua Lake in sufficient quantity to meet the municipal and industrial needs of this community area, together with adequate lake levels, were fully provided by General Itschner at a meeting together with officials of the city and county held in his office on May 14, 1956, as further contained in a letter from General Itschner dated May 15, 1956. In addition, a detailed copy of the plan was provided for us upon an indefinite loan basis.

As such, the objections previously raised at the hearing are withdrawn and we earnestly desire that the program may proceed as expeditiously as possible to a favorable conclusion, thereby providing much needed relief to a great area within the county of Chautauqua.

Very sincerely yours,

CARL F. SANFORD, *Mayor.*

Mr. REED. Are there any questions that you have?

Mr. DAVIS. Are there any questions by any of the members?

(No response.)

Mr. DAVIS. There are no questions. Thank you, Major Reed.

Mr. Wright.

BENBROOK RESERVOIR, TEXAS—H. R. 10964

Mr. WRIGHT. Mr. Chairman and members of the committee: My bill, H. R. 10964, provides for the use of water storage in the Benbrook Reservoir in Texas by the city of Fort Worth on a paying basis.

The city of Fort Worth is facing an immediate emergency. On the heels of a prolonged drought over the past 5 years Fort Worth's available water supply dwindled from some 500,000 acre-feet to only about 140,000 acre-feet, during which time the population of the city increased from some 300,000 up to about 375,000. They are facing a mean, hot summer, in which the per capita demands for water will be greatly increased. If we are to avoid some very stringent water rationing and very severe water restrictions it is imperative that we provide some authority now.

Happily, right at the gate of the city is a reservoir which was approved by the Congress and constructed for the purposes of flood control and navigation. Certain waters in the Benbrook Reservoir are set aside for navigation, but navigation is at least 10 years off, I think. We have talked with the members of the Corps of Engineers and the Secretary of the Army said they have no objection to the passage of this legislation, which would permit the Corps of Engineers to enter into an agreement to furnish these navigation waters and sell them to the city of Fort Worth for their use until such time as they are needed for navigational purposes, for which this structure was originally contemplated. As it stands now they are not serving one useful purpose in the world, but sitting out there and evaporating. Meanwhile the people of Fort Worth are facing a situation in which they are likely to go thirsty.

That in essence is the purpose of this bill. It may be that General Itschner might want to elaborate further on it. He is familiar with the examination made by other representatives of the Corps of Engineers.

General ITSCHNER. Mr. Wright, we certainly subscribe to everything you have said. I think you have said it better than we could.

We do have capacity in the reservoir for future navigation, which is not needed until that navigation is established. We feel, therefore, that it would be a waste of a natural resource not to make use of that water. If the city of Fort Worth is willing and anxious to purchase that water until such time as navigation requires it, we feel that is to the advantage of the Federal Government as well as the State of Texas and the city of Fort Worth and, therefore, we subscribe to the legislation which you have introduced.

Mr. SCHWENGEL. I understand they have some nice suburbs down there like Dallas which might need help too, and we ought to give a little serious consideration to this. I would like to move we approve this legislation at this time.

Mr. BALDWIN. Could I ask a question of General Itschner? When you mention that navigation is 10 years off, what do you mean? Navigation will come at such time as somebody develops enough interest down there actually to develop some shipping line going through that section of the river. Is that what you mean?

General ITSCHNER. That is partly it. We have a study now which is in progress to determine whether navigation on the Trinity River is justified. That study itself will not be finished for some time, depending on funding, and it is not at all certain that we will recommend navigation. It will depend upon future development of the river and the feasibility at some time in the future.

Mr. BALDWIN. I have a second question. Will you folks use some arrangement as to the remuneration paid for this by the city involved? Is that the way it will be done?

General ITSCHNER. Yes, sir. We will. We have had preliminary discussions with local interests on it which led us to believe that they will pay an equitable share of the cost of the project for the water they use.

Mr. BALDWIN. In other words, this bill will result in no net financial cost to the Federal Government in any form?

General ITSCHNER. Actually it will be a gain to the Federal Government because it will be reimbursed for the water storage capacity in the reservoir, for which no payments are being made at this time.

Mr. BALDWIN. I will second the motion of Mr. Schwengel.

Mr. DAVIS. It is purely academic, but your question suggested this as to how on earth you would arrive at a fair value of water that was in a reservoir which was going to be used by a city. I do not want you to answer that questoin, but I rather think it would be involved to figure the fair value of 1 million gallons of water in a reservoir.

Mr. WRIGHT. Off the record.

(Discussion off the record.)

Mr. DAVIS. I am afraid the people of this country do not realize at this moment the serious question confronting the country in the way of a water problem. The water tables are continually getting lower and when you are away from a stream that problem increases. I know on the Mississippi River in the last 2 or 3 seasons we have had

an abnormally low river. With all of that tremendous amount of water that is going through there it has been extremely low. Yet you have to prepare for these floods all the way up and down the country because of the damage which can come from them overnight.

Yet on yesterday I heard some people in this immediate area who were so thankful that it rained all day slowly because they needed it so badly.

Did you start to say something, General?

General ITSCHNER. I do not think it is very important, but in answer to your remarks about how difficult it would be to determine a proper charge, there is one simple method which is authorized for use in some cases, and that is simply to take the proportion of the amount of storage that there will be in this reservoir for water supply as compared to the entire reservoir capacity and multiply that by the cost of the project including the capitalized cost of maintenance.

Mr. DAVIS. Before the vote on this, and without objection, the letter which came from the Secretary of the Army approving the project will be made a part of the record at this point.

(The letter referred to is as follows:)

DEPARTMENT OF THE ARMY,
Washington, D. C., May 25, 1956.

Hon. CHARLES A. BUCKLEY,
Chairman, Committee on Public Works, House of Representatives.

DEAR CHAIRMAN: Reference is made to your request for the views of the Department of the Army with respect to H. R. 10964, 84th Congress, a bill to provide for municipal use of storage water in Benbrook Dam, Tex.

The Department of the Army has considered the above-mentioned bill. The purpose of the bill is to modify the project for improvement of the Trinity River and tributaries, Texas, to authorize the Secretary of the Army to contract with the city of Fort Worth pursuant to section 6 of the Flood Control Act of December 22, 1944, as reenacted by the act of May 23, 1952 (33 U. S. C. 708), for the use of water-supply storage in the Benbrook Reservoir for municipal water supply until such time as the storage space is needed for navigation purposes.

The existing Benbrook Dam and Reservoir project was authorized by the River and Harbor Act approved March 2, 1945 (59 Stat. 10), in accordance with House Document 403, 77th Congress. The completed reservoir provides a total storage capacity of 258,600 acre-feet, of which 170,350 acre-feet are for flood control, 72,500 acre-feet of storage for possible future navigation on the Trinity River to Fort Worth, and a sedimentation reserve of 15,750 acre-feet. The authorization for Benbrook Dam and Reservoir provides for use of the navigation storage for streamflow regulation or recreation until such time as the downstream navigation project is authorized and constructed.

The Department is not opposed to an interim use of the navigation storage space for water-supply purposes as proposed in H. R. 10964. Therefore, the Department of the Army has no objection to enactment of the bill.

In the event of enactment of this bill, the Department would require of the city of Fort Worth reasonable compensation for the use of this storage space. No estimate is available at this time as to the amount of the payments which would be necessary.

Inasmuch as the Department has been requested to expedite the report, it is submitted without a determination by the Bureau of the Budget as to whether or not it conforms to the program of the President. As soon as cuh advice is received it will be forwarded to your committee.

Sincerely yours,

WILBER M. BRUCKER,
Secretary of the Army.

The meeting is adjourned at this time.

(Whereupon the subcommittee adjourned, subject to the call of the Chair.)

FLOOD CONTROL OMNIBUS BILL

THURSDAY, JUNE 7, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10 a. m., in room 1302, New House Office Building, Hon. Clifford Davis (chairman of the subcommittee) presiding.

Mr. DAVIS. The committee will be in order.

The Chair would like to announce that the House is in session at 10 o'clock this morning. We have set for hearing a number of very important projects, but of course you can see that we cannot always foresee the action of the House as to its meeting time.

I recognize that we have a great many out-of-city witnesses here. It is the purpose of the Chair to sit until we have a quorum call, at which time I will have to be excused long enough to go over and answer it, and then I am going to come back and ask for the cooperation of the members of this committee in keeping 1 or 2 of them with me until we make a record on the items set down for hearing today.

SMITH MOUNTAIN DAM, ROANOKE RIVER BASIN

Mr. DAVIS. First we take up the Smith Mountain Dam, Roanoke River Basin, Committee Resolution 245.

Major Garrett, representing the Corps of Engineers, will make a statement. We always hear from the engineers first because we have found that to be far more satisfactory.

I may say we had better have this hearing today because Governor Tuck has been giving me no peace about this hearing. We are all devoted to him, but he has insisted on a hearing. Also the present Governor of Virginia has written a very strong letter in opposition to the whole survey, so I will read that letter into the record in a few minutes for your enlightenment.

Major, we will hear from you because we want to dispatch these matters as quickly as possible.

STATEMENT OF MAJ. FELIX GARRETT, CORPS OF ENGINEERS

Major GARRETT. Yes, sir.

Mr. Chairman, on September 29, 1949, this committe adopted a resolution directing the Board of Engineers for Rivers and Harbors to review the plan of development for the Roanoke River Basin for flood control and other purposes to determine whether it was advisable

to construct the Smith Mountain Dam as the next project to be developed in that basin. This was limited to an examination of preliminary scope.

On the 15th of June 1951, the Corps of Engineers forwarded a report to this committee suggesting that a survey report be prepared for this particular project. Since that time no changes have occurred that would cause us to change our recommendation.

The estimated cost of such a survey at the present time is $50,000.

That is all I have to present, Mr. Chairman. Are there any questions?

Mr. DAVIS. Are there any questions? Do you have a definite recommendation on the part of the Corps of Engineers as to whether or not this survey should be promptly made, Major?

Major GARRETT. Yes, sir. We feel that the survey should be made.

Mr. DAVIS. How much flood control is in it?

Major GARRETT. Actually very little flood control is in the project as reported in the preliminary examination. Of the total benefit of some $1 million, only $100,000 was for flood control.

Mr. DAVIS. The rest is power?

Major GARRETT. Yes, sir. It is primarily a power project.

Mr. DAVIS. This letter of June 15 estimated the cost at $16,000.

Major GARRETT. The cost at the present time, Mr. Chairman, is $50,000 for the survey.

Mr. DAVIS. It is up $34,000?

Major GARRETT. Yes, sir.

Mr. DAVIS. That is since this letter received from the Department of June 15, 1951. That was 5 years ago.

Major GARRETT. Yes, sir.

Mr. DAVIS. If you will remain where you are for just a moment, there may be some questions.

Our former colleague, Governor Stanley of Virginia, writes as follows:

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Public Works,
House Office Building, Washington, D. C.

DEAR CLIFF: It has come to my attention that your subcommittee of the House Public Works Committee is about to hold a hearing on the question of whether the Army Chief of Engineers should be asked to make a survey report on the Smith Mountain project on the Roanoke River in my State, so I trust you will permit me to express to you and the committee my views on the matter for what they may be worth.

As is clear from the Army Engineers General Report of the early 1940's on the Roanoke River Basin with which I am familiar and which was up for consideration a number of times while I was serving in the Congress, this is really a power project and with such a slight flavor of flood control that it never received any serious consideration in the Congress; and, of course, it has no navigation feature whatsoever.

I have been informed that the Appalachian Electric Power Co., with headquarters in Roanoke, is preparing to construct the project and it is my personal view that nothing should be put in the way of having taxpaying private capital do the job. It is my understanding that for such a private development, the State and local taxes would exceed $200,000 per year and, in addition, there would, of course, be the heavy Federal income tax. Because of considerations like these, it is the wish of Virginia taxpayers and it is certainly the policy of Virginia not to have any more Federal powerplants constructed in the State than can be helped, and, may I add, certainly not unless there were a shortage of power and private industry was unable to supply it, which is not the case in

Virginia. A further report by the Army engineers could hardly be expected to reveal any more favorable report from a flood control standpoint than the 1940 reports, and it would undesirably complicate and further delay the development of this project by private capital.

The Virginia Department of Highways is already making a complete study of the flooded area to determine the cost of relocating highways and bridges in the area and cooperating in every way with the Appalachian Electric Power Co.

I commend the above facts to you and your committee for the most favorable consideration.

Sincerely yours,

THOS. B. STANLEY.

Off the record.

(Discussion off the record.

Mr. DAVIS. On the record.

The bells have rung for a quorum call on the floor of the House.

Governor Tuck, did you wish to say something before we recess to permit us to go to the Floor?

STATEMENT OF HON. WILLIAM M. TUCK, MEMBER OF CONGRESS FROM THE STATE OF VIRGINIA

Mr. TUCK. Mr. Chairman, I would suggest you let me complete my little introductory statement and introduce these gentlemen, and then you will still have plenty of time to go over to the floor to answer the roll call. Some of us may be able to come back earlier than others. Is that all right, sir?

Mr. DAVIS. That is all right. You may proceed, Governor.

Mr. TUCK. First I want to say to you, Mr. Chairman and gentlemen of the committee, that I deeply appreciate the courtesy of the members of this committee in hearing my constituents and friends, particularly in the light of the fact that there was no notice in advance to all of us that the House was in session this morning at 10 o'clock.

There are present today a number of prominent businessmen and citizens of my district, some of whom are members and officials of the Roanoke River Basin Association. They are requesting that the Chief of Engineers, Department of the Army, be authorized to conduct a survey and submit a report thereon with respect to the Smith Mountain Dam and hydroelectric project in the Roanoke River Basin in Pittsylvania County, Va.

It is their understanding that the Army Engineers have recommended a further survey, which has been confirmed here this morning. They are of the opinion that it is advisable and practicable for the Chief of Engineers of the Army to make the survey and prepare a report thereon, regardless of whether the project is constructed by private industry or by the Federal Government.

They point out that the estimated cost of the proposed survey and report is relatively small and believe the advantages fully justify the modest expenditure. These gentlemen believe that a survey and report based on present conditions will be of value to the public, to private industry, and to the Federal Government, and I know this committee will give full consideration to their request along these lines.

Also present today are prominent constituents of my colleague,

the Honorable L. H. Fountain, of the Second District of North Carolina.

With your permission, Mr. Chairman, Mr. Fountain and I would consider it a privilege to introduce the gentlemen who are in attendance and are interested in this matter.

At this point I should like to present and introduce them, and I shall ask each of them to stand as his name is called.

Mr. Glenn B. Updike of Danville, Va., who is chairman of the Roanoke River Basin Association.

Eric W. Rodgers, secretary-treasurer of the same association, the Roanoke River Basin Association, Scotland Neck, N. C.

Chapman W. Dudley, a banker, Union Hall, Va.

Frank Wilson, retired executive of Marshall Field and vice president of the First National Bank, Martinsville, Va.

S. S. Flythe, president of the First National Bank of Martinsville, Va.

C. S. Alexander, county commissioner, Halifax County, N. C., head of General Insurance Agency and Director of the Farm Credit Administration, third district.

Alexander Hudgins, executive secretary, Virginia Association of Electric Cooperatives, Blackstone, Va.

Col. Frank W. Reams, member of the Governor's Committee on Rivers and Harbors, Warrenton, N. C.

A. R. Parker, a merchant and hotel owner, Danville, Va.

Joe Parker, retired treasurer of Bedford, Bedford, Va.

Col. H. R. Skillman, Warrenton, N. C.

Lindsey L. Moore, attorney and member of the Virginia House of Delegates, Ringgold, Va.

Henry L. Hardie.

Mr. DAVIS. Do all of these gentlemen desire to be heard, Governor?

Mr. TUCK. No, sir. Just 3 or 4 of them, but I want to introduce them so that you will know who they are.

Then my secretary, Mr. A. G. Lacy.

Now I want to take the opportunity at this time of introducing my friend, Mr. G. L. Furr, who is executivee vice president and general manager of the Appalachian Electric Power Co., Roanoke, Va., who will also wish to be heard after these gentlemen are heard.

I suppose you have to get over on the floor now and it is my understanding all of us will come back just as soon as we can.

Mr. DAVIS. That is right. We certainly will.

It occurred to me, if this is a private power matter, that this big power company could spend this $50,000 and make their own survey, instead of the Government making a survey here. There is so little flood control in it. However, we will go into that when we come back.

Mr. TUCK. All right, sir.

Mr. DAVIS. The committee will recess temporarily.

(Whereupon a recess was had.)

Mr. DAVIS. The committee will resume its session and I hope we will not have another call for a little while, at least, although we may expect it at any time during the day.

Who desires to be the first witness in support?

Mr. TUCK. We would like to have Mr. Updike be the first witness.

STATEMENT OF GLENN B. UPDIKE, CHAIRMAN, ROANOKE RIVER BASIN ASSOCIATION, DANVILLE, VA.

Mr. UPDIKE. Mr. Chairman and gentlemen of the committee, my name is Glenn B. Updike. I am chairman of the Roanoke River Basin Association. I have been a resident of Pittsylvania County for 47 years. It is the county in which this site is located.

I am in the retail drug business. I would like to make a statement as chairman of the Roanoke River Basin Association.

This association is composed of a group of civic-minded citizens living in the Roanoke River Basin in Virginia and North Carolina, numbering approximately 1,500 members.

The group we have here today are members of our board of directors and represent our board, which numbers about 50 from all sections of the Roanoke River Basin. We are here under a directive of our board to urge that a further detailed survey of the Smith Mountain Hydroelectric Dam project be authorized as recommended by the United States Army Engineers in 1951.

This project is the present key dam in the overall comprehensive plan for the development of the Roanoke River Basin in the control, utilization, and development of the waters of the Roanoke River and its tributaries in Virginia and North Carolina.

Mr. Chairman, I was very much surprised by the statement of my good friend, the Governor of Virginia. I realize that circumstances change, but Mr. Stanley was our Representative here from the Fifth District at the time this matter was first taken up. If permissible, I would like to read a statement of his and ask that it be included for the record. This is from the hearings before this committee in the 81st Congress, 1st session, on H. R. 5472. This was a hearing being held on this project. I will read about three paragraphs, since it is a rather lengthy statement, and I know your time is valuable and you want to get it over with. This is a statement by Mr. Stanley, who in 1949 was our Representative from the Fifth District, and this is Mr. Stanley speaking.

I would like to ask that Mr. Stanley's statement running from page 153 through page 160 be placed in the record at this point. This has a statement in support from the city of Roanoke and there is some opposition to it also, and the Altavista Chamber of Commerce, which is the territory adjacent to the Smith Mountain Dam site.

Would it be permissible to have it included in the record? Some of the best arguments I know for the dam are included in that statement. That is why I asked for that.

Mr. DAVIS. Without objection, it will be made a part of the record.

(The document referred to is as follows:)

STATEMENT OF HON. THOMAS B. STANLEY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF VIRGINIA

Mr. STANLEY. Mr. Chairman, I have a prepared statement that is rather brief, and if I were to do it orally, it would be pretty much what I have in the prepared statement. Shall I proceed with it.

The CHAIRMAN. You may use your own discretion.

Mr. STANLEY. I represent the Fifth Congressional District of Virginia. I am grateful to you for the opportunity to appear in support of my bill, H. R. 3250, to authorize the construction of the Smith Mountain Dam and hydroelectric

power project in the Roanoke River Basin as a unit of the general plan for the comprehensive development of the basin for flood control and other purposes, as approved by the Flood Control Act of 1944.

The Roanoke River rises in the Allegheny Mountains and flows southeasterly for 400 miles through the States of Virginia and North Carolina, emptying into Albemarle Sound. The basin comprises a drainage area of 9,630 square miles, which is made up of farm land and industrial areas. For many years the Roanoke River and its tributaries have been subject to frequent and extensive floods causing widespread damage, the extent of which is reported in detail by the Chief of Engineers in House Document 65, Seventy-fourth Congress, and House Document 650, Seventy-eighth Congress, and by the Virginia State Planning Board in its recent reports.

On June 6, 1944, the Secretary of War transmitted a letter and accompanying papers, all of which are contained in House Document 650, Seventy-eighth Congress, second session, recommending a comprehensive plan for improvement of the Roanoke River Basin, consisting of 11 developments for hydroelectric power, flood control, navigation, and other uses. It was recommended that the initial step in the comprehensive plan should consist of the construction of dams and hydroelectric plants at Buggs Island on the Roanoke River and at Philpott on the Smith River. The entire plan for the comprehensive development of the Roanoke River Basin was approved by the Congress in Public Law 534, Seventy-eighth Congress, approved December 22, 1944, and the construction of the Buggs Island Reservoir on the Roanoke River and the Philpott Reservoir on the Smith River was authorized. The Division of Planning and Economic Development, Virginia Department of Conservation and Development, in its January 1949 report, "Development of the Roanoke River," contains the following statements:

"The advantages of the plan were sufficient to warrant its selection as the recommended scheme for the orderly comprehensive development of the water resources of the Roanoke River Basin.

"At the time of the study it was determined that the ultimate development would have an installed electrical-generating capacity of about 360,000 kilowatts.

"In the latest study the comprehensive plan for the fullest development of the water resources of the Roanoke River Basin, on an economically sound basis, contemplates the construction of multiple-purpose dams. At the time of that study the entire system of reservoirs showed an economic ratio of 1 to 1.47."

The proposed Smith Mountain project shows a favorable ratio of costs to benefits.

The rapid industrial development of the basin provides a ready market for electric power and there is a definite shortage at this time. As additional plants locate in the basin, this shortage will become more acute, and it is deemed advisable to proceed as rapidly as practicable with the development of the proposed 11 projects.

The Roanoke River Basin Association, whose membership is made up of leading agriculturists, businessmen, and manufacturers residing in the basin, at its annual meeting on February 21, 1949, went on record as favoring the construction of the Smith Mountain Dam and hydroelectric power project as the next step in the general plan for the development of the basin. The Chief of Engineers, in a letter dated May 6, 1949, filed with this statement, advised me as follows:

"As you know, the Smith Mountain project was one of the reservoirs included in the comprehensive plan for this basin recommended by the Corps of Engineers in a report set forth in House Document 650, 78th Congress, 2d session. The Flood Control Act of December 22, 1944, approved this plan and authorized the construction of the Buggs Island Reservoir on the Roanoke River and the Philpott Reservoir on the Smith River as the initial steps of this development.

"After a careful review of this plan, including consideration of the most recent data from the division engineer, North Atlantic division, and the district engineer, Norfolk District, it appears that the Smith Mountain Dam is favorably located in the Roanoke River Basin for flood control and recreational purposes, and these factors in addition to its value for power development indicate that its construction would be a logical next step by the Federal Government in the development of the comprehensive plan of improvement."

The Chairman of the Federal Power Commission, in his letter to me of April 22, 1949, filed herewith, stated in part as follows:

"As presently proposed by the Corps of Engineers, the Smith Mountain project would consist of a concrete gravity dam about 244 feet high and 800 feet long located at mile 314 on the Roanoke River, and a reservoir with a controlled

storage capacity of 825,000 acre-feet, and an uncontrolled surcharge capacity of 565,000 acre-feet. The powerplant, located at the toe of the dam, would have an installed capacity of 33,000 kilowatts capable of producing about 88 million kilowatt-hours of energy in an average year.

"The Smith Mountain project is important to the development of the Roanoke River Basin in view of its large reservoir capacity which could regulate the run-off from more than 1,000 square miles of drainage area for the benefit of 7 future downstream powerplants on the Roanoke River, including the Buggs Island plant now under construction. The project would also provide important flood control and recreational benefits."

I have the feeling that maybe the flood-control provisions or the flood-control protection has not been fully determined. Less than 2 years ago, while on one of the large plantations through which the Roanoke River flows, and talking with a gentleman who has just been nominated as Ambassador to France, Hon. David K. Bruce, on whose plantation we were at that time, he and his farm manager told me then that his low ground was almost rendered useless by the frequent floods in that area and that in his case, this farm had been owned by his family for a great number of years—I don't know that he told me how many, but I believe his father and grandfather also owned the plantation. He told me their record since they had been keeping it under his ownership, 3 crops out of the 10 from the low grounds along the Roanoke River.

I am sure this would be true all along the river because there are many, many very good-looking areas or acres of bottom land, as we call them down there in Virginia—they call it low ground along the river there, that is out of cultivation and out of use because of the frequent floods they have in that area.

It seems clear that the Smith Mountain project is an important unit in the general plan and will contribute greatly to the development of the basin for flood control, hydroelectric power development, and recreational purposes.

In December 1945, Governor Darden of Virginia, upon the recommendation of the Virginia State Planning Board, authorized the board to investigate and submit reports to him on proposed development in the Roanoke River Basin. He further approved and authorized the formation of a River Basin Committee, made up of selected personnel from the three engineering schools in Virginia. The present Governor of Virginia, Hon. William M. Tuck, authorized the continuation of this committee.

Dr. Raymond B. Long, commissioner, division of planning and economic development, Virginia Department of Conservation and Development, published and released in January 1949, a report in which he reviewed the progress of the development of the basin and reported upon proposed development. Dr. Long is director of the Virginia State Planning Board, which published in January 1947 the report of the river basin committee of the board. I did not file that report because it is rather voluminous and I would be glad to bring it to file it if the committee would refer to it.

I refer to these reports as evidence of the fact that there has been conformity with the policy prescribed by Public Law 534, Seventy-eighth Congress, relative to the conduct of investigation by the Chief of Engineers and the preparation of plans and proposals dealing with flood-control projects so as to provide full information to the State or States affected. In further compliance with such policy, I am informed that the district engineer, Norfolk district, will make available to the States affected full information relative to the recent review mentioned in the letter of the Chief of Engineers, of May 6, to which I have already referred.

Now, Mr. Chairman, I would like to file with the committee a letter dated May 6, 1949, Department of the Army, signed by Maj. Gen. Lewis A. Pick, addressed to me; and also a letter from the Federal Power Commission dated April 22, 1949. Also, one dated May 3, 1944, signed by Leland Olds and addressed to Gen. Eugene Reybold.

The CHAIRMAN. Without objection, the exhibits may be filed.

(The letters referred to are as follows:)

FEDERAL POWER COMMISSION,
Washington 25, April 22, 1949.

Hon. THOMAS B. STANLEY,
United States House of Representatives,
Washington, D. C.

MY DEAR REPRESENTATIVE STANLEY: Reference is made to your letter of March 30, 1949, requesting such information as might be available to the Commission

regarding the Smith Mountain Dam and hydroelectric powerplant project, a unit in the approved plan for the Roanoke River Basin. Enclosed with your letter was a copy of the bill H. R. 3250 introduced by you in the Eighty-first Congress, which would authorize the construction of this project.

As stated in your letter, the staff of the Commission cooperated closely with the Corps of Engineers during its investigation of the Roanoke River and participated in some of the studies leading to the formulation of the plan of development. Subsequently, the Commission, in its letter of May 3, 1944, to the Chief of Engineers, a copy of which is enclosed, concurred generally in the comprehensive plan of 11 dam and reservoir projects with power. Currently, the Commission's Atlanta regional office and the Norfolk District Office of the Corps of Engineers are cooperatively engaged in further studies and investigations of the basin.

As presently proposed by the Corps of Engineers, the Smith Mountain project would consist of a concrete gravity dam about 244 feet high and 800 feet long located at mile 314 on the Roanoke River, and a reservoir with a controlled storage capacity of 825,000 acre-feet, and an uncontrolled surcharge capacity of 565,000 acre-feet. The powerplant, located at the toe of the dam, would have an installed capacity of 33,000 kilowatts capable of producing about 88,000,000 kilowatt-hours of energy in an average year.

The Smith Mountain project is important to the development of the Roanoke River Basin in view of its large reservoir capacity which could regulate the runoff from more than 1,000 square miles of drainage area for the benefit of seven future downstream powerplants on the Roanoke River, including the Buggs Island plant now under construction. The project would also provide important flood control and recreational benefits.

I trust that this information will be adequate to serve your purpose.

Sincerely yours,

NELSON LEE SMITH, *Chairman.*

MAY 3, 1944.

Maj. Gen. EUGENE REYBOLD,
Chief of Engineers, War Department, Washington, D. C.

Subject: Roanoke River, Va. and N. C.

DEAR GENERAL REYBOLDS This is in response to your letter dated February 14, 1944, forwarding copies of the reports of the district and division engineers, and of the Board of Engineers for Rivers and Harbors on the Roanoke River, Va. and N. C., and requesting comments of the Commission thereon.

The Board recommends improvement of the Roanoke River and tributaries for flood control, navigation, the generation, transmission, and sale of hydroelectric power, and for other benefical uses, by the construction of dams and hydroelectric powerplants at Buggs Island, Gaston, Roanoke Rapids, Smith Mountain, Leesville, Taber, Melrose, Randolph, Philpott, Stuart, and Schoolfield, in general accordance with the plans of the district engineer with such modifications as may be advisable, at an estimated cost of $124 million. The aggregate installed capacity at these 11 projects would be 386,300 kilowatts, and on the average the generation of electric energy would amount to 1,695,200,000 kilowatt-hours annually, of which 1,229,700,000 kilowatt-hours would be primary energy. The average cost of generation would be 2.91 mills per kilowatt-hour and the ratio of benefits to cost for the complete development has been estimated at 1.47

The Board believes that it would be advisable, in order to insure the best service in the area, that provision be made to construct, operate, and maintain transmission lines, substations and facilities, and structures appurtenant thereto, as may be found necessary for the transmission, interchange, and sale of energy.

As an initial step in this improvement the Board recommends the construction of the large Buggs Island and the Philpott projects, both including power, at an estimated cost of $36,140,000. The initial installation at these projects would aggregate 94,500 kilowatts, and on the average the generation of electric energy would amount to 455 million kilowatt-hours annually, of which 300 million kilowatt-hours would be primary energy. The cost of energy at the Buggs Island project is estimated at 3.04 mills per kilowatt-hour, and at Philpott 4.05 mills. The ratios of benefits to costs are estimated at 1.35 and 1.30, respectively.

In response to the letter dated May 5, 1942, from your office the Commission, by letter dated July 23, 1943, transmitted to you its comments with respect to the proposed large Buggs Island project and raised the question as to whether it would be advisable to develop the head available at the Buggs Island site by the construction of two smaller dams. The thoroughness with which your Department has gone into this question and has presented the results of the further

studies along these lines in the comprehensive report now under consideration is appreciated.

Reviewing further the Commission's previous views respect to the development of the Roanoke River Basin, the Commission by letter to you, dated November 10, 1943, agreed with the Board that the proposed Philpott multiple-purpose project, with modifications that may later prove to be desirable, would be an essential unit in the comprehensive development of the Smith and Roanoke River Basins.

The Commission staff has continued its studies of the Roanoke River Basin in cooperation with representatives of your Department and concurs in the conclusion of your reporting officers that the Buggs Island project should be constructed substantially as recommended by them. The staff is also of the opinion that the Buggs Island project and the previously recommended Philpott project taken together would comprise a desirable initial step in the development of the basin, and would afford substantial flood-control benefits in the lower Roanoke River and along the Smith River, respectively, in addition to making it possible to develop a substantial block of low-cost hydroelectric power.

As proposed by the district engineer, the Philpott, Smith Mountain, Randolph, Stuart, and Schoolfield Reservoirs would not have gated spillways. The Commission staff believes that crest gates should be installed on the spillways of all of these projects, except Philpott, for the purpose of providing controlled flood storage and greater power storage with resulting increases in the benefits from both flood control and power. The staff also believes that it would be desirable to raise the top of the gates proposed by the district engineer on the Leesville, Taber, Melrose, Buggs Island, Gaston, and Roanoke Rapids projects in amounts varying from 2 to 5 feet for the same reasons; and that the Stuart project should be constructed to the higher level considered by the district engineer.

With the modifications suggested by the staff, the initial installed capacity for the entire development would be increased from 357,800 kilowatts, exclusive of the proposed spare unit at Buggs Island, to about 428,000 kilowatts, and the average annual energy output would be increased to about 1,795 million kilowatt-hours. The primary energy would be increased from 1,229,700,000 kilowatt-hours to about 1,450 million kilowatt-hours. The staff reports that the cost of these modifications would be relatively small and well justified by the additional flood control and power benefits.

A study of available maps and survey records reveals that there are additional dam and reservoir sites in the Roanoke River Basin which will merit investigation at some future date. These are the Walnut Cove site on the upper Dan River about Pine Hall, N. C.; the Auglins Mill site on the Mayo River, a tributary of the upper Dan River; the Carr Ford site on the Pigg River, a tributary to the upper Roanoke River; site on the Banister River, a tributary of the Dan; and on the Hyco, also a tributary of the Dan. The first two of these are above the Schoolfield Reservoir and the third is above the Randolph Reservoir. Projects on the Hyco and Banister Rivers would have an effect only on the Buggs Island project and the lower river.

Based upon the consideration given hereinbefore, and upon careful review of the reports of your Department, the Commission concurs in the conclusion of the Board of Engineers for Rivers and Harbors that the comprehensive development of the Roanoke River Basin, in general accordance with the plans prepared therefor by the district engineer consisting of 11 dam and reservoir projects with power, is desirable and that the Buggs Island and Philpott projects would constitute a desirable initial step in the development of the Roanoke River Basin. The Commission believes that the power which could be produced at the Buggs Island and Philpott projects could be absorbed and profitably utilized in the postwar period within a reasonably short time following their construction and that plans, therefore, for these two projects should be prepared with the view to their construction in the early postwar period.

The Commission also recommends that careful consideration be given to the suggestions of its staff for the modifications outlined herein, including the installation of gates at ungated spillways and the increase in the height of spillway gates where now proposed. The Commission will be glad to have its staff confer with representatives of your Department in this and in other matters having to do with the details of the development of this basin.

Sincerely,

LELAND OLDS, *Chairman.*

DEPARTMENT OF THE ARMY,
OFFICE OF THE CHIEF OF ENGINEERS,
Washington, May 6, 1949.

Hon. THOMAS B. STANLEY,
House of Representatives, Washington, D. C.

DEAR MR. STANLEY: Reference is made to your letter of March 8, 1949, in which you request an expression of my views regarding construction of the Smith Mountain project as being the next step in the comprehensive plan to develop the Roanoke River Basin.

As you know the Smith Mountain project was one of the reservoirs included in the comprehensive plan for this basin recommended by the Corps of Engineers in a report set forth in House Document 650, Seventh-eighth Congress, second session. The Flood Control Act of December 22, 1944, approved this plan and authorized the construction of the Buggs Island Reservoir on the Roanoke River and the Philpott Reservoir on the Smith River as the initial step of this development.

After a careful review of this plan, including consideration of the most recent data from the division engineer, North Atlantic division, and the district engineer, Norfolk district, it appears that the Smith Mountain Dam is favorably located in the Roanoke River Basin for flood control and recreational purposes, and these factors in addition to its value for power development indicate that its construction would be a logical next step by the Federal Government in the development of the comprehensive plan of improvement.

If I can assist you further in this matter, I shall be pleased to do so promptly upon your request.

Sincerely yours,

LEWIS A. PICK,
Major General, Chief of Engineers.

Mr. STANLEY. Mr. Chairman, if I may, I have a few resolutions that I would like to file with the committee.

The CHAIRMAN. Will you identify them, please?

Mr. STANLEY. I shall be glad to.

One is from the Gretna Chamber of Commerce in Virginia. Gretna is a small town adjacent to this project in Pittsylvania County. They are in favor of it.

I have another from the city of Roanoke, Va., also in favor of the proposed Smith Mountain Dam. I would like to file that.

I have another resolution by the board of supervisors of Charlotte County through which the Roanoke River flows. They are in favor of the project. I would also like to file that one.

I have another one from a great number of citizens from the county of Pittsylvania, who are filing this petition in support of the authorization and construction of the Smith Mountain Dam.

Then I have copies of a letter, one each addressed to the senior and the junior Senators from Virginia, from the board of supervisors of Pittsylvania County, going on record as favoring the filing.

The CHAIRMAN. Those communications attached to the statement may be included in this part of the record without objection.

(The documents referred to are as follows:)

GRETNA CHAMBER OF COMMERCE
Gretna, Va., May 12, 1949.

Hon. T. B. STANLEY,
House Office Building, Washington, D. C.

DEAR MR. STANLEY: At the regular monthly meeting on May 10, 1949, the Gretna Chamber of Commerce passed the following resolution:

"*Be it resolved*, That the Gretna Chamber of Commerce go on record as supporting the Smith Mountain Dam project and that copies of this resolution be sent to the Honorable T. B. Stanley, Congressman, Fifth Virginia District, and to Senators Harry F. Byrd and Willis A. Robertson."

Very truly yours,

M. H. AYLOR, *Secretary.*

CITY OF ROANOKE, VA., *March 18, 1949.*

Hon. THOMAS B. STANLEY,
House of Representatives, Washington, D. C.

DEAR SIR: I am attaching hereto copy of Resolution 9872, endorsing House bills 3250 and 3416 authorizing and providing for "the construction of the Smith

Mountain Dam and hydroelectric powerplant project in the Roanoke River Basin," as adopted by the Council of the City of Roanoke at its meeting on Monday, March 14, 1949.

Very truly yours,

M. K. MOORMAN, *City Clerk.*

IN THE COUNCIL FOR THE CITY OF ROANOKE, VA., THE 14TH DAY OF MARCH 1949

No. 9872

A resolution endorsing House bills 3250 and 3416 authorizing and providing for the construction of the Smith Mountain Dam and hydroelectric powerplant project in the Roanoke River Basin.

Whereas the proposed Smith Mountain Dam and hydroelectric powerplant project on the Roanoke River in Virginia is a unit of the general plan for the comprehensive development of the Roanoke River Basin for flood control and other purposes as approved by the act of December 22, 1944, entitled "An act authorizing the construction of certain public works on rivers and harbors for flood control, and for other purposes," and

Whereas this council is interested in the carrying out of the purposes of the aforesaid act of December 22, 1944, and especially in that portion thereof calling for the construction of the Smith Mountain Dam and hydroelectric power project on the Roanoke River in Virginia: Therefore be it

Resolved by the Council of the City of Roanoke, That said council go on record as endorsing the carrying out of the purposes of the aforesaid act of December 22, 1944, and especially in that portion thereof calling for the construction of the Smith Mountain Dam and hydroelectric powerplant project on the Roanoke River in Virginia as soon as practicable, be it further

Resolved, That the city clerk be, and he is hereby, directed to forward a copy of this resolution to the Honorable William M. Whittington, chairman of the committee on public works, and to each Virginia Member of the Congress of the United States.

Attest:

M. K. MOORMAN, *City Clerk.*

At a regular meeting of the board of supervisors of Charlotte County, held at the courthouse of said county, on Monday, the 21st day of March 1949, the following resolution was adopted by the board:

"*Be it resolved by the Board of Supervisors of Charlotte County*, That this board approves of the enactment by the Congress of H. R. 3250, introduced by Hon. Thomas B. Stanley, relating to the construction of the Smith Mountain Dam."

The clerk is instructed to send a copy of this resolution to Hon. Thomas B. Stanley.

A copy

Teste

H. B. CHERMSIDE, *Clerk.*

CHATHAM, VA., *February 26, 1949.*

Hon. HARRY F. BYRD,
Senate Office, Washington, D. C.
Hon. A. WILLIS ROBERTSON,
Senate Office, Washington, D. C.
Hon. THOMAS B. STANLEY,
House Office, Washington, D. C.

GENTLEMEN: We the undersigned citizens of Pittsylvania County, Va., petition your support for authorization and construction of the Smith Mountain Dam.

Wesley W. Watson, Chatham, Va.; Jas. T. Dalton, Chatham, Va.; Howard Woods, Chatham, Va.; M. H. Watson, Jr.; H. M. Whitehead, Chatham, Va.; N. H. Williams, Chatham, Va.; E. P. Carter, Chatham, Va.; T. W. Yickhold, Chatham, Va.; Preston Moses, Chatham, Va., Route 2; Perry Shelton; E. T. Walker, Chatham, Va.; Roy A. Outlaw, Chatham, Va., Route 2; Joel S. Linthicum, Chatham, Va.

PITTSYLVANIA COUNTY,
Chatham, Va., March 21, 1949.

Hon. A. WILLIS ROBERTSON,
United States Senator,
Senate Chamber, Washington, D. C.

DEAR SIR: We wish to bring to your attention the introduction of bill No. 3250 in the House of Representatives by Hon. Thomas B. Stanley, authorizing the construction of the Smith Mountain Dam and hydroelectric power project in the Roanoke River Basin.

The Board of Supervisors of Pittsylvania County is very much interested in securing the early construction of this dam and hope that you will give this bill your favorable consideration at the proper time.

Very truly yours,

BOARD OF SUPERVISORS,
PITTSYLVANIA COUNTY, VA.,
By O. H. KELLEY, *Chairman.*

PITTSYLVANIA COUNTY,
Chatham, Va., March 21, 1949.

Hon. HARRY F. BYRD,
United States Senator,
Senate Chamber, Washington, D. C.

DEAR SIR: We wish to bring to your attention the introduction of bill No. 3250 in the House of Representatives by Hon. Thomas B. Stanley, authorizing the construction of the Smith Mountain Dam and hydroelectric power project in the Roanoke River Basin.

The Board of Supervisors of Pittsylvania County is very much interested in securing the early construction of this dam and hope that you will give this bill your favorable consideration at the proper time.

Very truly yours,

BOARD OF SUPERVISORS,
PITTSYLVANIA COUNTY, VA.,
By O. H. KELLEY, *Chairman.*

The CHAIRMAN. We have been delighted to have your statement, sir.
Mr. STANLEY. Thank you, sir.

Mr. UPDIKE. We feel that its economic justification should be explored promptly by this survey. Its value as an unusually attractive site has been established and considered for many years and recommended by outstanding consulting engineers in addition to the recommendations of the United States Army engineers for further study.

Some of the natural advantages are that the site of the dam lies in a gap between two mountains—this supplying a comparatively narrow dam with wide reservoir behind—there are a few relocations of roads; no relocation of railroads—the area is not thickly populated and, relatively speaking, is not of great agricultural value.

The benefits accruing, in addition to the power generated to make it economically feasible, are many. The flood-control benefits at this time are greater than in the past. The series of existing and prospective dams below the project will benefit greatly from downstream benefits from this great storage reservoir of water impounded by the Smith Mountain Dam. The importance of proper conservation of our water resources has been emphasized recently in many ways and apparently we are just beginning to seriously realize its importance. Other needed benefits in the area are stream pollution abatement, recreational benefits. It will also supplement the steam-generating plants operating in the area and help answer the ever-increasing demand for electric power. Soil erosion and other agricultural benefits must also be considered.

It is true that the Appalachian Electric & Power Co. has considered this site for many years. They also purchased the dam site in January 1955. We have the most friendly feeling for this fine firm. However, we also feel that construction has been delayed greatly and the element of time and overall need for this key project justifies this survey as speedily as possible. With all due respect for the good intentions of the Appalachian Electric & Power Co., it is recalled that the Virginia Electric & Power Co. purchased a great deal of property in the John H. Kerr Dams (Buggs Island) area—and the Carolina Power Co. also has a dam there—and had retained much of it over a period of 20 or 25 years—and did not construct the dam. It was constructed by the Federal Government, and since 1952 has been functioning as planned.

I understand last year they sold over $2 million worth of power.

Should Appalachian Electric & Power Co. decide within a reasonable length of time to construct the project, it would certainly be advantageous, although some of the byproduct benefits would be lost. If they decide not to construct within a reasonable length of time, we feel the delay would cost a great deal more than the $20,000 or more requested here for the survey.

When this survey was first discussed, the cost was $16,000. In 6 years it has gone up to $50,000. There has been a great increase there due to the increase brought about by inflation and other means.

We have established the fact that Appalachian would not be interested in going into the construction of this project on a cooperative basis with the Federal Government.

Our organization believes in private enterprise; however, when needed, projects such as this can be economically justified and private enterprise will not supply them. We believe the Federal Government is justified in developing such needs for the benefit of all the people.

The private power companies are doing a wonderful job and one of our objectives has been to earnestly endeavor to bring public and private power interests closer together in the overall development of the basin. At our annual meeting they are invited to attend. At our last meeting last year two speakers from private power companies were on our program and two from the electric cooperatives and the Army engineers. We believe we have been helpful and have made progress.

The opponents of this project for obvious reasons are the coal companies, the railroads, and the private power companies. I know of no other organized opposition. We have the greatest respect for these groups and their important part in our economy. However, we believe that working together in their proper fields that these projects work out for the benefit of both groups and the public.

It will be noted that in the overall development of the Roanoke River Basin at present there are two Federal dam projects, the John H. Kerr Dam (Buggs Island) and the Philpott Dam. The latter is in Mr. Stanley's territory up in Virginia. Another of the major dams, the Roanoke Rapids Dam at Roanoke Rapids, N. C., has been built and is in operation by the Virginia Electric & Power Co. I had the pleasure of attending the dedication of this project on April 4, 1956. VEPCO has also applied for a license to build another dam just above this project, the Gaston Dam. Should this be granted and constructed there will be 2 projects by public power and 2 projects by private

power in the Roanoke River Basin. I state this to show that both groups are developing our basin—not one separately, but both of them, and it will be a 50–50 project.

We feel that the comprehensive plan for the devolopment of the Roanoke River Basin should not be held up indefinitely.

We believe that present planning and construction of this project in the foreseeable future to be in keeping with the orderly development of our natural resources. Now that the lower reaches of the Roanoke River Basin are being developed, this dam in the upper reaches will prove an added asset in long-range planning.

With due respect to the ultimate intentions of private power companies concerning this project, we feel that circumstances may develop which may change their plans. We feel that the potential value of the project fully warrants this survey.

As we all know, floods give no advance warning and happen in the most unexpected places at times. We believe this project to be insurance against flood damage with premiums paid by the various benefits. This project will be the second largest reservoir of the dams in the Roanoke River Basin and is the necessary step in any future development of the whole Roanoke River Basin.

Our group has been working for this overall development since 1946, and speaking for our Roanoke River Basin Association, we respectfully request that this further detailed survey be authorized to determine the facts in the case.

If there are any questions, I shall be glad to try to answer them.

I thank you for granting us this hearing and we realize the importance of your time and have brought a small group here today, some of whom would like to be heard.

If there are any questions, I shall be glad to try to answer them.

Mr. DAVIS. We have a representative of the power company here, the executive vice president. Maybe when their time comes they can tell us whether they plan to build this at any time soon.

Mr. UPDIKE. We have 1 or 2 other witnesses that we would like to present also.

Mr. DAVIS. Mr. Burnside and Mr. Baldwin may want to ask questions.

Mr. UPDIKE. Yes, sir.

Mr. BURNSIDE. Under the proposed dam that the association would build there would be about 2 percent flood control. Is that right?

Mr. UPDIKE. The last survey showed that. We believe sincerely that that has increased since that time. One reason is that the water would be used over. It is above two other dams now and when the Gaston Dam is built there will be three of them. There will be a heavy reservoir at the head and there will be four dams, you might say, on the Roanoke River Basin.

Mr. BURNSIDE. Under the Applachian agreement with the people of Virginia that will give you about a third more flood control. Is that right?

Mr. UPDIKE. You mean percentagewise?

Mr. BURNSIDE. Yes. About 33⅓ pecent flood control. Under the proposal by the Applachian Power Co. they plan to erect a higher dam than the association would erect. Is that correct?

Mr. UPDIKE. I do not know their plans exactly, but I know they are interested in it, as I have stated here, and we do not doubt their sin-

cerity at all. But what we want to get is something done on it before we die of old age.

Mr. BURNSIDE. I can see your problem and I am very sympathetic to it. Here is the question: The main thing is we are all citizens of Virginia and we want to do right and help the folks there. The main thing is you want some flood control and you want electric power in a rather reasonable time. Those are the two things you want.

Mr. UPDIKE. Yes. It is part of the comprehensive development of the whole Roanoke River Basin, and until that next step is taken we cannot do anything.

Mr. BURNSIDE. If the Appalachian Electric Power Co. or American Gas & Electric Co, whichever is involved in it, would give you the power and flood control, you would be perfectly happy, would you not?

Mr. UPDIKE. We want it built. Yes, sir.

Mr. BURNSIDE. If it is built, I say.

Mr. UPDIKE. And we want flood control. We realize, as I have stated, that some benefits would be lost—byproducts, I call them—some recreational and flood-control benefits.

Mr. BURNSIDE. If they build a dam one-third larger than you anticipate building in this organization, you would be happy and satisfied. Is that right?

Mr. UPDIKE. If we can get the flood control. Of course, we are looking at it industrially too because we think it will help develop more industry.

Mr. BURNSIDE. If they give you three times as much power as you anticipate you would be happy?

Mr. UPDIKE. We would be if we could be assured of that and see it in the foreseeable future.

Mr. BURNSIDE. Has not Appalachian Power Co., or whatever company is involved, just in the last 6 months bought the dam site and conducted surveys on it, and is still conducting surveys at the present time?

Mr. UPDIKE. I have stated here they bought the dam site, and I also stated that VEPCO 25 years ago bought some of the site around Buggs Island Dam, but it was not built by them but was built by the Federal Government, finally.

Mr. BURNSIDE. Is this the Appalachian Power Co. or the Virginia Electric Power Co. that is involved?

Mr. UPDIKE. This is Appalachian.

Mr. BURNSIDE. Do you know of any reason why the Appalachian Power Co. should be delaying it? Have you any evidence of that fact?

Mr. UPDIKE. I thought so at one time, but frankly I think they are sincerely interested, but I don't know. What we want to do is expedite the matter, and if they are not going to build we want to see the Federal Government do it. We think it is needed.

Mr. BURNSIDE. But you would be perfectly satisfied if they did build a dam and you got the flood control and the power?

Mr. UPDIKE. If it answers that question and they did it in the foreseeable future with some definite time stated.

Mr. BURNSIDE. Then you would be happy and all of your delegation would be happy?

Mr. UPDIKE. Yes, sir. Mr. Eric Rodgers, the secretary-treasurer of our organization, would like to make a statement.

Mr. DAVIS. Yes. We are glad to have you here, Mr. Updike.

Mr. Rodgers, you may come forward and make your statement.

STATEMENT OF ERIC W. RODGERS, SECRETARY-TREASURER, ROANOKE RIVER BASIN ASSOCIATION OF VIRGINIA AND NORTH CAROLINA, SCOTLAND NECK, N. C.

Mr. RODGERS. Mr. Chairman and members of the committee: My name is Eric W. Rodgers. I am secretary-treasurer of the Roanoke River Basin Association and a newspaper publisher of Scotland Neck, N. C.

We appreciate this opportunity, long awaited, to appear before your committee to present our argument for authorization of a survey by the Corps of Engineers, United States Army, to determine whether or not it is feasible to construct a multipurpose dam on the Roanoke River at the site commonly known as the Smith Mountain site in Virginia.

The purpose of this association as outlined in its articles of organization states that it "is to promote and support measures for the control and utilization of the waters of the Roanoke River and its tributaries in Virginia and North Carolina." Pursuant to the carrying out of this purpose, this organization has been in operation since 1944, and prior to that time the Roanoke River Flood Control committee urged similar activities.

This organization has no paid officers and is supported entirely by voluntary contributions of some 1,500 citizens resident in the valley. Prior to the date of the organization and subsequent to the 1940 flood the Roanoke River Flood Control committee was operating and was absorbed by this organization.

The United States Congress approved funds for the construction of dams at Buggs Island, Va., and Philpott Dam on the Smith River in Virginia, and set forth in the preliminary document a series of 11 dams, including the 2 already mentioned in the valley of the Roanoke and its tributaries. One of these dams was subsequently built by the Virginia Electric & Power Co. at Roanoke Rapids, N. C., and a second at Gaston, N. C., is the subject of an application for license by the same company to the Federal Power Commission. The Smith Mountain Dam is the next in the overall picture.

Hearings were conducted in Virginia on the proposed construction of the Smith Mountain Dam on January 27, 1950, by the Corps of Engineers, with a majority of those present approving the project. The Corps of Engineers following this meeting did preliminary work to determine whether or not the project at Smith Mountain could be economically justified. Their report has been with the Public Works Committee of the House of Representatives ever since it was made by the Corps of Engineers.

We have tried on numerous occasions to get some action in this matter without result. A delegation from Virginia and North Carolina held a conference with Congressman George A. Dondero, Republican of Michigan, and Chairman of the Public Works Committee, at his office here in Washington more than 2 years ago, and we felt

at the time that Mr. Dondero was going to act. The sum involved was said to be $18,000 for a preliminary survey of the project to determine its feasibility. Since that time the matter has been the subject of further correspondence between Mr. Dondero and officers of our association. On July 19, 1954, Mr. Dondero wrote me as follows:

> The Smith Mountain Dam is before the committee under a resolution which does not need to be incorporated in the omnibus bill. The committee has a record of opposition to approval of the survey. Before any further action is taken hearings will be necessary and you will be advised promptly when a hearing is scheduled.

We immediately filed notice that we would like to be heard at any hearing, and as a matter of fact we have requested the hearing, but none has ever been held and we have never received any notification from Washington until the present time.

It is our belief that the Smith Mountain project has many benefits for the Roanoke River Basin, whether it is built by private or public enterprise. Necessarily in a flood-control project there could not be private activity and, therefore, it would be a public project under those conditions. We feel that the entire area is due the further survey contemplated by the Corps of Engineers, United States Army, to ascertain the facts as to whether or not is is economically feasible for the United States Government to undertake the construction of this project.

We want you to know that we are not here saying that the Government should or should not undertake the project, but we do believe the Government should give us, as citizens, full information through a survey to determine whether or not it falls within the realm of Government projects. The sum involved is trifling compared with huge appropriations for other purposes. We are asking only a few thousand dollars where the Government is committing itself to huge projects for other nations along the same line involving millions of dollars.

We have been informed that the Appalachian Electric Power Co. is interested in securing the site for itself and constructing the project. However, there has been long delay and we wish to end this delay. We have asked the Appalachian Co. to state what, if any, plans they have made looking toward construction, have asked them if they are definitely considering construction. We have asked them on what terms they will cooperate with us and with other agencies looking toward this survey which we now ask.

The record is clear. In July 1954, we wrote this company asking about their plans for development at Smith Mountain. Further correspondence resulted in a conference and officers and representatives of the Appalachian Electric Power Co. were invited to attend, and did attend, the annual meeting of this association in 1955, at which time Col. F. W. Scheidenhelm, consulting engineer of New York City, presented the views of the power company. Principally the company was interested in having the upper Roanoke removed from the status of a navigable stream, and further to require that downstream public projects pay for benefits as a result of upstream private projects in the same manner that private companies may be required to pay for benefits derived from public projects further upstream. As to the latter, our directors have agreed that this is a fair proposition. With reference to the former, withdrawing the upper por-

tion of the Roanoke River Basin from the classification of a navigable stream, our directors believe too many factors are involved and, therefore, they could not approve same because this would leave control of water in the upper river entirely in the hands of a private agency and public dams further down would be dependent on private agencies. Further, our association felt that we would be in a weak position since 40 States in the Union, including Virginia and North Carolina, had taken part some years ago in a similar measure which went before the Supreme Court and the Supreme Court refused to allow the withdrawal of the particular stream in question from Federal jurisdiction.

The Appalachian Electric Power Co., through its vice president and general manager, Mr. G. L. Furr, advised me on February 2, 1956, that, "I am glad to be able to report that as a result of the studies of the project * * * and of earnest and time-consuming effort there has been a favorable outcome"; and he also said that, "the Smith Mountain matter has come to a head." That was several months ago.

Mr. Furr added that they were continuing their efforts to reduce costs and economic burden but promptly would begin to take other steps with reference to construction of the dam. For more than 2½ years we have awaited action by the Appalachian Electric Power Co. and we have been told that things were moving along, but there were certain delays, and since this letter of February 2, 1956, we have had no further definite word on the subject.

It is not our purpose to muddy the waters. It is not our purpose to fight anyone within the valley who has a legitimate desire to develop the resources of the people for all the people. It is our purpose, however, to do all we can for the development of the valley and to make full use of the resources for the benefit of the people, and to this end this association is pledged. Therefore, we feel we are on sound ground in asking that the survey be made. It will not in any way jeopardize the interests of the Appalachian Electric Power Co. in the matter. On the other hand, it will give a definite answer as to whether or not public construction is justified. It will bring the project closer, in our opinion, to construction, whether it be by private or public interests.

We hope you will give this matter full consideration and that you will permit the Corps of Engineers to proceed with the survey which will determine whether or not the project is justified as a public project. Thank you for your attention and time.

Mr. DAVIS. We certainly cannot charge the present occupant of the position of Representative of that district, Governor Tuck, with any lack of diligence, because he has certainly insisted on a hearing.

Mr. RODGERS. Yes, sir. We are deeply appreciative of what Governor Tuck has done.

Mr. DAVIS. If we had not given him a hearing we would all have had to leave Washington, or else we would not have a chance to do anything else.

Mr. JONES. Mr. Chairman.

Mr. DAVIS. Mr. Jones.

Mr. JONES. Mr. Rodgers, do you know whether or not the Appalachian Electric Power Co. made application for a temporary license for the construction of this dam before the Federal Power Commission?

Mr. RODGERS. No, sir. I do not. The last information we have had is that the Appalachian Electric Power Co. was bringing the matter to a head in February. Since that time we have heard, and I think there has been some mention made in the newspapers of Virginia, I think one columnist wrote an article that the Appalachian Electric Power Co. was interested in securing lands in that area.

Mr. JONES. Do you know whether or not the representations made by your organization and Mr. Scheidenhelm to your organization of first obtaining a release of the project as a navigable stream and, secondly, to give assurances that the Appalachian Power Co. in the event of the construction of the project would be reimbursed because of the benefits that would accrue to publicly owned projects—were those two contentions still being made by the power company?

Mr. RODGERS. I am not in a position to say. I think the power company and our association and most fair-minded people are agreeable to the idea that if the private enterprise has to pay for downstream benefits which they receive from upstream projects, then Federal Government projects or public projects should pay for the benefits which they receive from upstream private projects. I think we are in agreement on that.

Mr. JONES. As I understand the power company put two propositions to your organization.

Mr. RODGERS. Yes, sir.

Mr. JONES. The first is that this be withdrawn as a navigable stream.

Mr. RODGERS. Yes, sir.

Mr. JONES. You say you do not have the authority to do that in view of the Supreme Court's decision. You cannot make that determination or give the assurance to the power company that it will be taken out of the category of navigable streams. Is that correct?

Mr. RODGERS. No, sir. We could not do that and we thought we were on poor ground.

Mr. JONES. The second proposition is that the benefits of the downstream projects will be reimbursed to the company when and if it builds this project. Under existing law we, that is, the public or federally owned projects, do not have to pay to reimburse a private utility for similar costs. That is existing law. So you cannot change the law to accommodate the power company, can you?

Mr. RODGERS. No, sir, but there are bills pending before Congress with reference to that.

Mr. JONES. I understand that, but I am asking you this question: Can your organization give to Colonel Scheidenhelm the assurance that if the Appalachian Power Co. builds that project they will receive reimbursement for the benefits that accrue to downstream federally owned projects?

Mr. RODGERS. No, sir. We could not say that. All we could say to the Appalachian Power Co. is we agreed with them on that.

Mr. JONES. You agree with them as a question of policy and not with reference to this specific project.

Mr. RODGERS. That is right. Yes, sir.

Mr. JONES. Are those two contingencies still outstanding in the negotiations between the Appalachian Power Co. and your organization?

Mr. RODGERS. We have had no further word on the subject since February, except Mr. Furr's letter at that time saying they were resolving some of the problems. Whether or not they have been able to do anything about the downstream benefits through legislation I do not know. I know they are interested in legislation and Colonel Scheidenhelm furnished me with copies of the bills. But as to the other question, I do not know what has been done.

Mr. JONES. I merely point that out, Mr. Rodgers, to show you that we are in the same predicament that your organization is of giving assurances on conditions that might arise subsequently. I just wanted to point that out.

Mr. RODGERS. I see what you mean, but those are the two conditions they put up to us and we answered them the best we could, namely, we agreed with one as a general policy that it was a fair proposition; and with the other where the Supreme Court answered the question, we were not in a position to bring a Supreme Court test.

Mr. JONES. Yes, sir. Thank you very much.

Mr. BURNSIDE. Would your group be satisfied if you got a third more flood control and three times as much power by putting up this high dam in the place of a lower dam that has been considered by your organization?

Mr. RODGERS. I should say that I would certainly be satisfied, and I think that the majority of our association would. However, we have not heard of any such project until the present time. I have never seen any plans of Appalachian nor do I know the details of any dam they would build, except in a general way.

Colonel Scheidenhelm made a statement at our annual meeting that they would build a different type of dam from what the Corps of Engineers would build, and that in his opinion it would answer the question of flood control. However, as to the technical details of it I do not know anything about that.

Mr. DAVIS. Are there any other questions?

(No response.)

Mr. DAVIS. Who is the next witness, Governor?

Mr. TUCK. I would like to introduce Mr. Alexander Hudgins.

Mr. DAVIS. Mr. Hudgins, we will be glad to hear from you.

STATEMENT OF ALEXANDER HUDGINS, MANAGER, VIRGINIA ASSOCIATION OF ELECTRIC COOPERATIVES

Mr. HUDGINS. Thank you, Mr. Chairman.

Mr. DAVIS. Will you summarize your statement as much as you can, Mr. Hudgins?

Mr. HUDGINS. I shall be glad to, Mr. Chairman.

Mr. Chairman, my name is Alexander Hudgins and I am executive secretary of the Virginia Association of Electric Cooperatives, and also appearing here today in a dual role as a member of the board of directors of the Roanoke River Basin Association.

I would like to present my statement instead of reading it to you.

Mr. DAVIS. Without objection, we will make your formal statement a part of the record at this point.

(The prepared statement of Mr. Hudgins is as follows:)

STATEMENT OF ALEXANDER HUDGINS, MANAGER, VIRGINIA ASSOCIATION OF ELECTRIC COOPERATIVES

Mr. Chairman and gentlemen of the committee, my name is Alexander Hudgins. I am manager of the Virginia Association of Electric Cooperatives, with offices at 317 East Franklin Street, Richmond, Va. The Virginia association is affiliated with the National Rural Electric Cooperative Association which, as you probably know, is the service organization for 90 percent of all REA-financed electric systems in the United States and Alaska.

My purpose in appearing before you today is to support such additional studies relating to Smith Mountain Dam as may be necessary to determine feasibility and place the Congress in a position to authorize the project for construction within the next few years. It is our hope that if the study which we are asking for today shows the project to be feasible, then planning funds can be made available so that the project can be placed under construction and completed in due course.

The Smith Mountain Reservoir is located on the Roanoke River, 314 miles above its mouth near the town of Altavista, Va. The project was originally planned as a concrete gravity-type dam, 244 feet high, with a reservoir capacity of 825,000 acre-feet and a power development of 41,000 kilowatts. According to the 1955 annual report of the Chief of Engineers, the estimated total cost of the project, exclusive of transmission lines, is $31,800,000, based on 1954 price levels. The project was approved, as a unit of the general plan for the comprehensive development of the Roanoke River Basin for flood control and other purposes, by the Flood Control Act of 1944. This act also specifically authorized construction of the 204,000-kilowatt John H. Kerr project and the 14,000-kilowatt Philpott project, each of which is also part of the comprehensive plan for the Roanoke River Basin. These projects are now complete and in operation.

The rural electric cooperatives of Virginia are presently enjoying the benefits of a portion of the low-cost power produced at the Kerr project. After several years of negotiation, an agreement between the Virginia Electric & Power Co. and the United States Department of the Interior was executed which provides for the wheeling and firming of 60,000 kilowatts of power from the John H. Kerr project to 12 of the rural electric systems in Virginia and 5 in North Carolina. During fiscal 1955, these 12 systems in Virginia purchased Federal power from the Kerr Dam at from 6.5 to 6.9 mills per kilowatt hour. The only alternate source of purchased power available is the Virginia Electric & Power Co., which makes a flat wholesale rate of 7.5 mills per kilowatt hour available to the rural electric systems.

The Federal power from the John H. Kerr project, as wheeled and firmed to us by the Virginia Electric & Power Co., has been of tremendous benefit to the rural electric cooperatives of Virginia and has been a major contributing factor in placing some of these cooperatives, for the first time, in a position to avoid incurring annual operating deficits.

You see, on an average, the cost of wholesale power represents the largest single item of operating expense incurred by the rural electric systems. Throughout the country, approximately 32 percent of total operating expenses is allocated to the purchase of wholesale power. Therefore, this item of cost is always subject to the closest scrutiny by system management and is a factor which we constantly seek to reduce as good businessmen, in the same manner as major utility companies which generate their own power seek to minimize fuel costs.

The entire 60,000 kilowatts of power allocated to us from the John H. Kerr project is now almost completely exhausted. The entire block is being used by the rural electric systems in Virginia and North Carolina and we are finding it necessary in nearly all cases to purchase supplemental power and energy from the Virginia Electric & Power Co. at the 7.5 mill rate. This means, of course, that as our loads grow, and the Federal power presently allocated to us becomes a smaller and smaller portion of our total requirements, our average rate for the combination of Federal and private power which we purchase will, each year, more closely approach the 7.5 mill rate being charged by the Virginia Electric & Power Co. and will get further and further away from the 6.5 to 6.9 mill rate charged us by the United States.

During the last few days, in preparation for this hearing, we have polled the rural electric systems in Virginia in an effort to determine the load growth trends that they have experienced during the past few years, and the trend which we can anticipate within the foreseeable future. Due to the shortage in time

we have not received replies from all the systems, but have supplemented the information received from those systems who have replied with statistics available from the Rural Electrification Administration.

A summary of our figures appears in table I attached.

The table shows that the total energy used by the rural electric systems of Virginia increased 100 percent between 1950 and 1955. The estimates of those systems which replied to our questionnaire indicate that the demand for electricity in their areas will increase almost another 100 percent between now and 1961. There is no apparent tendency for the sustained increase of load which we have experienced over the past 15 years to diminish in the future, and we must prepare to meet this additional load with wholesale energy wherever it may be obtained, either by purchases from the Virginia Electric & Power Co., or from the Federal Government, or by the installation of generating facilities by the cooperatives themselves.

Let me also call your attention to the fact that the chart clearly shows that many of the systems which are purchasing power from the John H. Kerr project are already exceeding their quotas of Federal power and now purchase additional supplies of energy from the Virginia Electric & Power Co. As I have pointed out, the percentage of our total energy requirements that must come from the power company in future years will constrantly increase unless additional Federal power is made available. For this reason, we are most hopeful that additional Federal power can be made available to us from projects such as Smith Mountain now under consideration by the subcommittee, and from other projects approved as part of the comprehensive plan for development of the Roanoke Basin. We are also hopeful that other river basins in Virginia can be developed.

Rural electric systems throughout the country have traditionally supported construction by the Federal Government for those multiple-purpose projects which meet feasibility criteria and from which we can hope to receive some benefits.

For these reasons, we are asking the subcommittee to authorize, by resolution or other appropriate action, the Corps of Engineers to proceed with a complete study of the Smith Mountain project. It is our hope that if and when the project is constructed, power from it can be made available to the rural electric systems either through a Federal transmission system, if practicable, or in the alternative, through the system of the Virginia Electric & Power Co. under an extension of the present wheeling agreement.

Total energy input to rural electric cooperatives in Virginia, 1950–55, and estimated input for 1961

Cooperative	Average monthly kilowatt-hour input, 1950	Average monthly kilowatt-hour input, 1955	Average annual load growth (percent)	Percent of 1956 total monthly energy purchased from VEPCO at higher rate	Estimated monthly input 1961
Prince George Rural Electric Co-op	187,000	436,000	18.4	Not available	(1)
Community Electric Co-op	458,667	*1,072,000	18.5	11.3 percent	1,600,000
B. A. R. C. Electric Co-op	605,000	*1,014,000	11.0	do	1,500,000
Tri County Electric Co-op	242,000	*478,000	14.5	Does not purchase Federal Power.	1,116,700
Craig-Botetourt Electric Co-op	239,200	*496,500	15.8	10 percent	811,000
Accomack-Northampton Electric Co-op.	542,351	*905,600	10.8	Does not purchase Federal Power.	1,414,000
Prince William Electric Co-op	845,000	*1,630,000	13.2	Does not apply	4,000,000
Central Virginia Electric Co-op	800,000	1,525,000	13.8	Not available	(1)
Chesapeake Island Electric Co-op	34,800	68,900	14.5	Generates all own power.	(1)
Mecklenburg Electric Co-op	1,100,000	2,480,000	17.3	Not available	(1)
Northern Neck Electric Co-op	423,000	872,000	15.6	do	(1)
Northern Piedmont Electric Co-op	480,000	944,000	14.6	do	(1)
Powell Valley Electric Co-op	714,000	1,565,000	16.9	Served entirely by TVA.	(1)
Shenandoah Valley Electric Co-op	1,514,000	2,990,000	14.6	Not available	(1)
Southside Electric Co-op	1,565,000	2,910,000	14.6	do	(1)
Virginia Electric Co-op	1,360,000	2,830,000	15.7	do	(1)
Total	11,110,018	{22,217,000 [2] 5,596,100}	14.9		10,441,200

[1] Not available.
[2] Total for figures designated by *.

Mr. HUDGINS. Thank you, Mr. Chairman. I would like to make a comment other than what appears in my statement.

Mr. DAVIS. You may proceed.

Mr. HUDGINS. We are here today to ask your committee to take the proper steps to have the Corps of Engineers complete this survey on the Smith Mountain Dam, so that we may know definitely what our next step can be in the development of this project.

The two witnesses who have appeared before you already I think have outlined all of the salient facts in connection with the Smith Mountain project. I would like only to add in my testimony that in Virginia there are 16 rural electric systems. Twelve of these are enjoying the benefits of hydro power from the Buggs Island or Kerr projects. As a result of that they have been able to be more successful in their operation of their system. We have just about exhausted all of the supply earmarked to us from the Kerr project and we have a supplementary supply which brings to us additional power from the Virginia Electric Power Co.

During the last 5 years, as my statement will show, the demand for power by our systems has increased almost double. This we think will double again in the next 5 to 8 years. We are paying between 6.6 mills and 6.9 mills for our power from the Kerr project, and our supplementary contract with Virginia Electric Power Co. gives us 7.5 mill power. If we continue to use that the cost of our wholesale power will naturally increase.

I know you on this committee are interested in Smith Mountain and you look at flood control as your reason for the interest. I think flood control will be about half of what is in Buggs Island, which is already built by the Federal Government. But you also know in order to build this project, hydro power is an important part of the project and is necessary in order to pay the bill.

So we are asking you today, Mr. Chairman, under the authority you have, to continue this survey, so that we may know exactly what such a project would cost. Once we have that information we will then be in a position to determine how the project should be constructed and come back to you and present the facts as they appear to us at that time.

My I add this part which is not in my statement? You apparently place a great deal of emphasis on Governor Stanley's letter, which you read early in the morning. I would like to say if you will note in that letter the Governor said that was his personal view.

I would like also to call your attention to the fact that the Governor, while a Member of Congress, introduced a bill on Smith Mountain asking that it be constructed.

I would like to call to your attention also that in that letter there is a reference to Virginia not wanting any more public power projects, and it surely must be the Governor's view, because I cannot think that is the policy of Virginia. Certainly it is not the view of the many people with whom I have come in contact, and we represent about 100,000 families in the State of Virginia.

It is a pleasure to appear before you, Mr. Chairman, and I trust your committee will permit the Corps of Engineers to continue the survey to establish the information needed pending the construction of the project.

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Mr. DAVIS. Of course, I read the Governor's letter because we must give courtesy and respect to the governor of any State who asks that his statement be made a part of the record.

Mr. HUDGINS. Yes.

Mr. DAVIS. I thought all of you would be interested in my reading out loud just what he had to say.

Are there any questions?

(No response.)

Mr. DAVIS. All right. Thank you, Mr. Hudgins.

Governor Tuck?

Mr. TUCK. We have here the Honorable Lindsey Moore, of the House of Delegates of Virginia, whose views I understand are in substantial accord with the views heretofore expressed by the other three witnesses. Mr. Moore is a prominent attorney and citizen, as well as a member of the legislature of Pittsylvania County, in which the dam is situated. However, in view of the fact that you have been so generous and so courteous, and inasmuch as we believe these witnesses have full covered the ground, I will say now that we do not have any more witnesses for our side.

In the absence of my colleague and friend, Congressman Poff of the Sixth District of Virginia, I will now do him the courtesy of introducing his constituent, Mr. G. L. Furr, executive vice president and general manager of the Appalachian Power Co., of Roanoke, Va.

Mr. POFF. If the gentleman would yield, I would like to note that with all due appreciation for his kindness I am present, and I would like to have the pleasure of introducing Mr. Furr.

Mr. TUCK. I beg your pardon. I thought you had not returned.

Mr. POFF. Thank you very much for your kindness.

Mr. DAVIS. Mr. Furr, you have been doubly introduced. Mr. Furr.

STATEMENT OF G. L. FURR, VICE PRESIDENT AND GENERAL MANAGER, APPALACHIAN ELECTRIC POWER CO.

Mr. FURR. Mr. Chairman and members of the committee, my principal concern now is to introduce the gentleman that we want to speak for the power company, and then I will turn it over to him.

The Appalachian Electric Power Co., with headquarters at Roanoke, Va., is a part of the American Gas & Electric System, which is one of the largest, fully integrated electric power systems in the country, extending from central Virginia west to the outskirts of Chicago and operating in seven States.

I want to introduce Mr. Harold Turner, who is an executive vice president of the American Gas & Electric System and an officer of Appalachian Electric Power Co.

Mr. Turner has been connected with the system for 31 years. During that time he has held responsible positions, both in engineering and operating capacities, in the system headquarters, and in the operating companies. He was the vice president and general manager of the Ohio Power Co., a sister company of Appalachian, before assuming his present position. When he was appointed operating executive vice president of the American Gas & Electric System, he succeeded Mr. Graham Claytor, who appeared before this committee regarding the Smith Mountain project in 1949.

Mr. Turner is familiar with the operations of Appalachian Electric Power Co. and he will present the company's position with regard to the proposed Smith Mountain project as well as the progress that has been made to the present time, if that is satisfactory.

Mr. DAVIS. He will be in a position to tell us when you want to go to work on this project?

Mr. FURR. Ask him any question you would like to.

Mr. DAVIS. Come along then, Mr. Turner.

STATEMENT OF HAROLD E. TURNER, EXECUTIVE VICE PRESIDENT, AMERICAN GAS & ELECTRIC CO.

Mr. TURNER. Mr. Chairman and gentlemen of the committee: Mr. Furr has indicated to you my acquaintance with the operations of the component companies of the American Gas & Electric System, and so I shall try to be brief. I would like to say parenthetically that the name "Gas" in the corporate name is a carryover from the days many years ago when we were in the gas business, but we are essentially and purely an electric utility.

The site of Smith Mountain is near the southeastern edge of the area served by Appalachian. It is about 30 miles east downstream on the Roanoke River from the city of Roanoke. For a good many years Appalachian and its predecessors have had an interest looking toward the development of the water power on the upper Roanoke. In fact, early in the history of the company a relatively small hydroelectric development was made on the stream just below the city of Roanoke, and the company also acquired a dam site at Hardy's Ford further downstream, and within the area of the now proposed Smith Mountain Reservoir.

In the late twenties and in the thirties Appalachian had investigations made to see whether it could economically develop the Smith Mountain site. These investigations were made by Col. F. W. Scheidenhelm of New York, an independent consulting engineer. The system has been a client of his for more than 30 years.

In both of these studies the recommendation of the company was unfavorable to the project, as things then stood.

When the Smith Mountain project came before this committee in 1949, Appalachian naturally enough appeared in opposition to such a Federal power development within its power market territory. But at the hearing my predecessor, Mr. Claytor, stated the definite intention that as soon as the Applachian Co. and its affiliated system could economically absorb the output, Appalachian would construct the Smith Mountain project.

If I may remind you gentlemen on the committee that your action in 1949 was to refuse to authorize the project for Federal construction. Instead you requested the Army engineers to make a preliminary examination, but you coupled that request with an understanding to the effect that nothing should be done to interfere with private development of the project.

In reliance upon that understanding, and in view of the remarkable growth of its power load, the company decided in 1953 that it was appropriate to carefully review the situation. Again Colonel Scheidenhelm was requested to go into the matter. His office made a thorough

study, and this time, in the latter part of 1955 he reported with the change in dam design, but with a considerably larger development than the Army engineers had proposed, the Smith Mountain project could undoubtedly be worked out economically for the American Gas & Electric Company System.

Mr. Rodgers has referred to a letter from Mr. Furr in which Mr. Furr outlined some of the things that we propose to do. I would like to tell you a little more specifically what we have done.

In the meantime Appalachian acquired the property of an earlier promoting company, the Roanoke-Staunton River Power Co. This included the Smith Mountain Dam site and land of two other sites. It proceeded to acquire additional land for the reservoir where available at fair prices. The company now owns some 6,000 acres in connection with the project. At present there is going on detailed geological and exploratory investigation of the Smith Mountain Dam site. One object, of course, is to determine exactly where the dam is to be located.

In this connection the company called in Prof. Wilbur Nelson, head of the geological department of the University of Virginia, and former State geologist of Virginia. Also in cooperation with the Virginia department of highways studies and plans are being made for Roanoke of roads and bridges in the large reservoir area.

The company has already incurred a cost of some quarter million dollars, and the company believes that financing of the construction of the project will pose no insurmountable problems. In short, Appalachian is continuing with the full intention of solving all problems involved and of beginning construction within a year, or at the most two.

The question has been raised as to whether a Federal Power Commission license would be necessary and, if so, what the company's attitude would be under those circumstances. In the case of a large hydroelectric project like this there are, as I have indicated, a good many problems. The question as to whether a Federal license would be required is only one of those problems.

On that one, our present view is that no Federal license should be required. But, of course, we would need a Virginia license.

We are studying the legal aspects of the status of this relatively small upper part of the stream which, of course, is not navigable at Smith Mountain or above. Assuming it should develop that a Federal license is essential, it would, of course, be the question of our taking out a license as a prelude to construction. That question would in due course have to be decided in the light of all the existing facts relating to the project.

In the meantime we are not holding back, but are proceeding on all fronts to get the job under way in the belief that within reasonable time all of the various problems will have been resolved satisfactorily.

With the permission of the committee I would like to have Colonel Scheidenhelm say a few things briefly about the characteristics of the project.

Mr. DAVIS. Are there any questions?

Mr. SMITH. In other words, if it becomes necessary to get a Federal license there is still doubt in your mind as to whether you would proceed with the project?

Mr. TURNER. We just feel at this time we just cannot categorically say one way or another how we feel about it.

Mr. SMITH. In other words, the answer to the question is "Yes"?

Mr. TURNER. Would you mind restating your question?

Mr. SMITH. You said in your testimony and in your answer to my first question that you have to reconsider or consider it if it became obvious that you have to have a Federal license for the project.

Mr. TURNER. That is right. I said it was only one——

Mr. SMITH. If it becomes clear you have to have a Federal license for the project, will you apply for one?

Mr. TURNER. I think most likely we will, but I would like to reserve on that question at the moment.

Mr. SMITH. If you were required to have one, and you would not apply for one, then you could not build it, could you?

Mr. TURNER. I think there might be a question of whether we had to have one and I would prefer not to answer that question, but leave it to——

Mr. SMITH. I think my point has been made. It is very obvious you still have not decided whether you want to build it or not.

Mr. DAVIS. Mr. Jones had a question.

Mr. JONES. The question I had, Mr. Chairman, is, what is the difference in the position that you take now as compared to that which you took in 1949? They are practically the same, are they not?

Mr. TURNER. In 1949 we could not justify the project.

Mr. JONES. But you were in opposition to Federal development in 1949.

Mr. TURNER. In 1949 it is my recollection that Mr. Claytor testified to the fact that there was an adequate power supply in the area and Smith Mountain was not needed.

Mr. JONES. But you were in opposition to the Federal development of the project in 1949?

Mr. TURNER. That is correct.

Mr. JONES. And the reason why you were in opposition in 1949 is that you had hopes of developing it by your own company?

Mr. TURNER. Yes, sir. We had hopes of it at that time.

Mr. JONES. The testimony you have given before the committee at the present moment is the same as it was in 1949. You hope to develop it if and when it meets the pleasure and the economic justifications of the engineers of your company.

Mr. TURNER. I think not quite that. We are actually spending money and doing work and trying to bring this to a resolution very quickly, because at this time we feel while the economics of the development are pretty much a standoff matter, there is nevertheless a much greater basis for us doing it.

Mr. JONES. If there is legal doubt, Mr. Turner, in your mind as to whether or not a Federal license is necessary to obtain permission to construct this project, and there are valid legal requirements on your part to submit an application to the Federal Power Commission, why have you not filed an application for a permit?

Mr. TURNER. We have not resolved all of the other questions.

Mr. JONES. But if there is doubt, why do you not file an application? That is the normal procedure. It is not a difficult procedure.

It is just a perfunctory matter to file for a temporary license to be obtained.

Mr. TURNER. I think until this time at least we felt it was not yet necessary to do that.

Mr. JONES. If you had obtained the license then it would not be necessary for you to come to this forum, because in the Roanoke Rapids decision of the Supreme Court it clearly showed the intent of the company to carry out the project and reserved to the company all of its rights and authority to obtain the Federal permission for construction. Naturally we would not have to deal with the question then.

Mr. TURNER. That was in the case of the Virginia Electric Power Co.

Mr. JONES. Yes, sir.

Mr. TURNER. Yes, sir.

Mr. JONES. And here we do not even have an authorized project, but are just discussing the possibility. If the company had a permit we would not even be questioning the project, in my opinion.

Mr. TURNER. I think I would like to say on the point of the survey that we are here to tell you what our position is, rather than to take a stand one way or another on that.

Mr. JONES. That is my understanding, but certainly the company expects, if it actually expects to build this project, it would take some steps to insure the continuation without making an investment. But here you are taking the same position you did in 1949. All you want to do is protract the consideration of a project to be constructed by the Congress at Federal cost, which you are interested in now. If you obtained a Federal license then that would resolve the question as far as the Congress is concerned, would it not?

Mr. TURNER. I do not believe the matter of the license alone would make a difference, would it?

Mr. JONES. I do not know, Mr. Chairman, but I do not remember in my 10 years' experience on this committee that the committee has undertaken to consider a Federal project where there is a license issued by the Federal Power Commission to a private company. We have deauthorized some projects which were authorized already as Federal projects in order that the private utility may obtain a license to perform certain works that would be in keeping with the authorized project or one that had been authorized by the Congress. But here you are coming to this committee and saying that you do not want it developed by the Federal Government, and at the same time you are saying you do not want to show good faith by applying for a license to construct the project.

Now as I understand the testimony of Mr. Rodgers, who preceded you, Colonel Scheidenhelm on behalf of the company made certain representations or conditions that it would be necessary for the citizens to give approval to, which they could not do under any conditions or could not give assurances on because it was beyond their legal capacity to warrant downstream benefits and also take this stream out of the category of navigable streams. Those two conditions could never be met by the people who want this project constructed, could they?

Mr. TURNER. On that point perhaps I should not speak for the Colonel, but with your approval have him speak for himself.

However, my recollection is that what the colonel had in mind there was that if we were able to proceed on that basis it would make the matter of deciding who did, that much simpler.

Mr. JONES. How could those people decide to give you that assurance?

Mr. TURNER. No. I do not think we were asking them to do that for us.

Mr. JONES. Are you arguing or stating to the committee you expect the Congress to meet those conditions?

Mr. TURNER. No. I think we hoped that an examination of the upper part of the river might settle the question of whether or not it would be necessary to obtain a license.

Mr. JONES. Mr. Turner, is it not the reason why you have not applied for a Federal license because you wanted these conditions met and you know under existing law the Federal Power Commission would not issue a license contrary to existing statute?

Mr. TURNER. Sir, I do not understand your question.

Mr. JONES. I have reviewed two propositions that I understood from the testimony of Mr. Rodgers, Colonel Scheidenhelm made to that committee at a meeting. Are you clear up to that point?

Mr. TURNER. Yes.

Mr. JONES. Those two conditions were, first, that the downstream Federal project should be credited with the benefits that would accrue by virtue of your company constructing the Smith Mountain project.

Mr. TURNER. That is, Colonel Scheidenhelm said that that would be a help to us.

Mr. JONES. Yes.

Mr. TURNER. That is correct.

Mr. JONES. If you applied for a Federal license and they gave you a permit or a permanent license, the Federal Power Commission could not give you that assurance, could they?

Mr. TURNER. The basin association could not. That is right.

Mr. JONES. Now point No. 2. Colonel Scheidenhelm, according to Mr. Rodgers, said that that should be taken out of the category of navigable streams. The Federal Power Commission could not determine whether or not that was a navigable stream in issuing a license, could they?

Mr. TURNER. No, sir. I would think not.

Mr. JONES. So are those two facts the reason why the company has not made application for a Federal permit or a Federal license?

Mr. TURNER. Congressman, with the permission of the committee, suppose Colonel Scheidenhelm, who is much better acquainted with that than I am, answers that, or see if he can answer your specific question.

Mr. JONES. The question I am asking you, Mr. Turner, only deals with whether or not the company has not filed for a permit from the Federal Power Commission because the Federal Power Commission could not satisfy your company on those two points.

Mr. TURNER. The company's position is this: That it might not be necessary to have a Federal license, that is, it might be possible that that part of the stream could be exempted from those requirements.

Mr. JONES. If it could and you are satisfied, then why are you here today?

Mr. TURNER. My position here is to tell you what we have been doing on this project and the work we are doing, and what we hope to wind up with.

Mr. JONES. If it is not necessary to obtain a Federal license and you already own the ground and you say it is only necessary to get approval from the State of Virginia, then what is hampering your successful completion of the project without coming to the Federal Government?

Mr. TURNER. I think a question might be raised and we would prefer to go ahead on a basis which would raise no questions. One of those bases might be to apply for a license and proceed, but we have not been able to determine in our own minds yet on that point.

Mr. JONES. You mean you have had this project up for consideration in your company since 1949 and your company still does not know whether or not, or you have not had an opinion from your lawyers as to whether or not a license is necessary?

Mr. TURNER. I think again, if I may, I would like to ask the colonel to answer that specific question.

Mr. DAVIS. If it will save time, let us get the colonel. Are there any other questions?

(No response.)

Mr. DAVIS. Come around, Colonel, and let us see if we cannot get started. We have been 7 years talking about this thing. I think they are just holding back. If we just authorize the survey that will give them some more time, because it will take the Engineers time to get the money for the survey and make the survey, and then the company may decide yes, or no, or sideways.

All right, Colonel.

STATEMENT OF COL. F. W. SCHEIDENHELM, CONSULTING ENGINEER

Colonel SCHEIDENHELM. Gentlemen, the last time I was before any part of this committee was before Mr. Jones' subcommittee doing that fine job on civil works.

Mr. JONES. I want to say, Mr. Chairman, that Colonel Scheidenhelm has always been helpful to the committee, and most cooperative and very generous, and he has had vast experience as an engineer.

Mr. DAVIS. There is no doubt about that.

Colonel SCHEIDENHELM. At that time I was representing the Engineers Joint Council. Now I am representing a private client.

This Smith Mountain project has been bedeviling this particular client of mine for many years and I in turn, as a consultant to the company, have been bedeviled by the company to try to work out something which would permit it to be constructed.

As is natural enough, the company preferred not to have a Federal power development in the midst of its territory. Pros and cons on that lie not in my bailiwick, but it has been difficult and it has been impossible until the last few years to work out something which was feasible economically.

What has taken place to bring that about? Well, first let me point out that this is a relatively small part of the total drainage area. The drainage area at the dam site is only about one-eighth of that at

the Buggs Island or the so-called John Kerr development downstream. It has a dam site that as such looks very good, and I think it is very good, but the drainage area is small.

Now in the meantime—and let me say definitely one of the things that I overheard here in a question was a statement about getting started on this in 1949. At that time there was no plan to go ahead on the part of the company. There was not even an investigation underway. It was not until 1953 that my office was asked to go into the project again and see whether or not anything could be worked out. I am glad to say that by the end of 1955 we did work out something.

And what were the reasons? Well, one was the fact that we had worked out a rock-filled dam which in our view can be built at substantially less cost—some millions of dollars less cost—than the conventional concrete dam. The other and more important one is that the system of which this would be a part has grown and has need of the kind of use that this project is suitable for; and that, therefore, one can do with it from the standpoint of economics something that could not have been done previously.

The system is tied together with high-tension transmission. That which takes place out in Indiana is immediately reflected in Virginia. If something goes wrong in Virginia there are other parts of the system to take care of it. But what is pertinent to this matter is that if something goes wrong out in Indiana, or even Chicago—to which the system is tied—the system in the East can help to take care of it.

Now the kind of development that is proposed to be set up is one which would serve as a sort of storage battery for the entire system, so practically at the pushing of a button if something goes wrong, as has gone wrong in the past in Indiana or Chicago—and the worst one was in Chicago—then the storage battery can be tapped to the extent of such amount of power as is available. That sort of thing can be done if the project is owned and operated and immediately flexible by those who are charged with the operation. It cannot be done except as a part of the other system.

I think it is about time that this project—the ghost of this project—be laid. The thing is in such shape that I think it is time to construct it, and this company is willing to construct it. That is, it is desirous of getting things together so that it can, and it is earnestly—I know this, gentlemen—it is earnestly endeavoring to get it into shape so that it can start within a year, or at most two, as Mr. Turner has stated.

I will give you a thumbnail sketch of what is proposed, and if that is not sufficient you can, of course, ask any questions.

In the first place, the type of project is in accord with the comprehensive plan of 1944, which had the approval of Congress in the Flood Control Act of that year. Actually it would be somewhat larger. The flood control aspect would be essentially the same. Flood control in the report which had the approval of Congress amounted to a little less than 2 percent. By boosting up the benefits the result became, in the preliminary examination report of the Army engineers of 1950, about 4 percent. It is still not a flood-control project.

If it is called a flood control project——

Mr. DAVIS. Do you think this committee should authorize the Engineers to make this survey?

Colonel SCHEIDENHELM. In my view, no. And I say that primarily because if that is done there will still be the question, is this some day going to be a Federal project or not. The company will therefore, let us say, have to be mindful of that, and be holding back.

Mr. DAVIS. Let us ask questions and maybe the colonel can answer your series of questions now, Mr. Jones.

Mr. JONES. Yes, sir.

The questions that came up in the discussion in July of 1954 between you and the representatives of the citizens' group who were interested in obtaining the project there were these: First, they stated that the company was interested in having the stream removed as a navigable stream. Secondly, there is the assurance that the downstream benefits would be available to the Appalachian Power Co. for the use which neither existed nor could be complied with by the local citizens under existing law. Are you still insisting on those two conditions?

Colonel SCHEIDENHELM. Well, of course, I am not the company, but I think I know what is——

Mr. DAVIS. Mr. Turner turned it over to you.

Colonel SCHEIDENHELM. Yes.

Mr. DAVIS. And you turn it over to Mr. Turner. Mr. Furr turned it over to Mr. Turner, who turns it over to you, and you turn it back to Mr. Turner. I would like to find somebody who can speak for that company. Maybe Mr. Furr will do it.

Colonel SCHEIDENHELM. I will do the best I can.

In the first place, it is not the situation of having the stream changed from a navigable water of the United States to a nonnavigable water. There may be some question as to whether it is a nonnavigable water, but counsel is of the view it is not. In the first place, everybody would agree that it is not navigable in fact. The question as to whether it is not a navigable water of the United States, or is a navigable water of the United States, is one that requires a lot of attention, naturally.

Mr. JONES. By whom, Colonel? It needs a lot of attention to determine whether it is or is not. I understood from the testimony of Mr. Rodgers that you in July of 1954 made representations on the part of the power company that you would like for them to have the project removed as a navigable stream. Maybe I am wrong about that.

Colonel SCHEIDENHELM. There is nothing—and it would be foolish to speak of having the association to do anything about it.

Mr. JONES. All right. Now point No. 2. You requested them to have some assurances made that the benefits that would be derived by the projects lower downstream that were federally owned through the construction by your company of the Smith Mountain project would be reimbursed to the private utilities. How could they give you that assurance?

Colonel SCHEIDENHELM. They could not do that either and there was no such request of them.

Mr. JONES. And Mr. Rodgers said, "Our directors agreed it was a fair proposition."

Colonel SCHEIDENHELM. Yes. I stated the two desiderata in that particular respect.

Mr. JONES. I do not want to delay this, Mr. Chairman.

Mr. DAVIS. That is what the company wants us to do—delay. This is Tinkers to Evers to Chance—Mr. Furr to Mr. Turner to the colonel, and back to Mr. Furr. They are just fooling around.

Mr. SMITH. The colonel said they would build it. The officers of the company could not tell us. The colonel is evidently in a better position to tell us what the company will do than the president or vice president.

Mr. DAVIS. They will have to go into executive session to see whether they want to approve what the colonel says. That is the old game.

Mr. BECKER. Do I get it straight that when Mr. Turner was on the stand he was indefinite in his answer to Mr. Jones' question as to whether or not they were going to go ahead with it, but I understood the colonel to say they are ready to proceed and go ahead, and will go ahead in the next year or 2 years? Is that correct?

Mr. SMITH. The point I am making is, I cannot understand how Mr. Turner, who is a vice president of the company, and according to Mr. Furr is speaking for the company—I cannot understand how he does not know whether they are going to build it or not, and Colonel Scheidenhelm, who is just a consulting engineer paid occasionally by the company, can say what the company is going to do.

Mr. BECKER. I just want to get the answer to that. Is that a correct statement, Colonel?

Colonel SCHEIDENHELM. If I understand you correctly, you were saying or putting up the assumption that the company will proceed within a year or two?

Mr. BECKER. That was what I understood you to say, sir. That is what I understood you to say.

Colonel SCHEIDENHELM. I do not believe I put it quite so categorically as that, but I will say this: That the company wants to proceed. It is on my back to do what I can toward that end, and it is spending money to the acquisition of land and of doing the work in the gorge.

Mr. BECKER. But, Colonel, if I may interrupt, now you are equivocating. I think you are changing your position from the answer that you gave before. You say now the company wants to do this. I think that is terribly different from what you said before. The question is not what they want to do or they would like to do. Mr. Jones' whole questioning proceeded along the lines of are they going to do it, and when are they going to do it. I cannot see any reason why there cannot be some answer to that question directly yes or no. If they spent $250,000 trying to get all of these answers, why can they not answer just that little question? Are they going to go ahead and proceed whether it is in 1 or 2 or 3 years? Are they or are they not?

Colonel SCHEIDENHELM. I have not the slightest doubt that they are going to go ahead.

Mr. JONES. You do not need a Federal license, as I understand the position of the company.

Colonel SCHEIDENHELM. That is the present view.

Mr. JONES. And it is not a navigable stream, according to the views of the company. Is that true?

Colonel SCHEIDENHELM. It has been so stated by the——

Mr. JONES. Then what in the world is keeping the company from going ahead and building it right now?

Colonel SCHEIDENHELM. There has not been an agreement with the department of highways completed as to the roads. There has not been all of the land acquired. Of course, they do not have to have all of it.

Mr. JONES. If the road is clear with no obstructions and no Federal interest in it then I do not see why we have to try the case in the wrong court. It looks to me like you could go ahead and build it. You have had it under consideration, as I understand it, since 1949.

Colonel SCHEIDENHELM. No, it has not been under consideration since 1949.

Mr. JONES. Then I will get back to Mr. Turner's statement. I understood him to say they appeared here in 1949 in opposition to it, and the reason why they were here in opposition is that the company expected to build the project.

Colonel SCHEIDENHELM. When the conditions were such that they could do it economically.

Mr. JONES. The days of great expectation should be over with, because as you say, you do not need a Federal license and it is not a navigable stream, and all you have to do is proceed with the project.

Colonel SCHEIDENHELM. I have not said they do not need a Federal license. I think it is an open question.

Mr. JONES. It seems to me a company as large as this which has so many wise lawyers and so many legal talents available, which they certainly have at their disposal, that they could have them advise them during the 7-year period as to whether or not they need a license. It seems strange to me. Colonel Scheidenhelm, that in a matter as simple as obtaining a temporary permit to construct the dam, that the company has not applied for it. Do you not think that is a strange way to do business where there is doubt?

Colonel SCHEIDENHELM. No, I do not, Mr. Jones. The fact is that until late in 1955, actually December 1955—and that is not many months ago——

Mr. JONES Yes, sir.

Colonel SCHEIDENHELM. They had no word from my office, and actually from me, as to whether it could economically be done if everything else could be cleaned up. At that time there had been no further exploration of the dam site. There had been no work with the department of highways. There had been no geological investigation. They went ahead with that——

Mr. JONES. All of those things can wait under a temporary license. You know that as well as I do, Colonel. You do not have to submit all of that information.

Colonel SCHEIDENHELM. As far as that is concerned, in my view there is no question that if they wished to take a license, and a license is needed, that they can get one. A number of developments have been made by that company under license——

Mr. JONES. That is right.

Colonel SCHEIDENHELM. And none of them had a preliminary permit.

Mr. JONES. If they gave you a preliminary permit and you decided later that the economics are not justifiable for the company to make an investment, all you have to do is let it expire.

Colonel SCHEIDENHELM. Yes, but after the preliminary permit is asked for and received, Mr. Jones, from that point on if they should decide that they think one is not necessary, it is not easy to recede.

Mr. JONES. Do you mean to tell me if you apply for a temporary license to construct a project it is difficult to recede and not carry out the permit? It is incumbent on the company to come back at a subsequent time and file before the Commission to the effect that they request a permanent permit, is it not? The company is required to do that, is it not?

Colonel SCHEIDENHELM. It is later required.

Mr. JONES. Yes.

Colonel SCHEIDENHELM. If they want a license.

Mr. JONES. Yes.

Colonel SCHEIDENHELM. Certainly.

Mr. JONES. It is incumbent on the company itself. If the company lets it expire, it expires by statute. Is that correct?

Colonel SCHEIDENHELM. Yes.

Mr. JONES. It is a temporary permit and if you do not exercise the right under the temporary permit of filing for a permanent permit, then by statute it expires.

Colonel SCHEIDENHELM. That is right. It cannot last more than 3 years.

Mr. JONES. So there is nothing incumbent on the company for them to do except to obtain the temporary permit.

Colonel SCHEIDENHELM. But nothing as regards the temporary permit has in the least held back what the company is doing.

Mr. JONES. I understood that.

Colonel SCHEIDENHELM. It is doing exactly what would be done if there were a preliminary permit. And just as in the case of Kanawha Valley plant——

Mr. JONES. Then why did you not get a permit?

Colonel SCHEIDENHELM. Because it is not clear—I, as the company—and I take it you mean that, of course—because it is not clear that one is needed. The fact is that that stream is in a very doubtful category.

Mr. JONES. Off the record.

(Discussion off the record.)

Mr. JONES. That is all.

Mr. BALDWIN. Let me ask you this question: The question was asked of the preceding witness, Mr. Turner. Are you here to oppose this committee's approving a survey?

Colonel SCHEIDENHELM. I understand that to be the position of the company.

Mr. BALDWIN. He did not state that to us. We asked the question and the question was answered stating that the company was here only to make available to us the position of the company as to what they were doing, but he did not say that the company was here to oppose a survey.

Colonel SCHEIDENHELM. I think that is what he meant. That is my understanding.

Mr. BALDWIN. Let me ask this question: If the company has all of these ifs, ands, and buts and uncertainties, in what way would you be harmed if we went ahead and authorized this survey? Unfortu-

nately from the standpoint of the Federal Government these surveys do not move very rapidly, and if you actually do all of the things you think you are going to do, in a year or two, you will actually get the permit before funds became available.

What harm will we do you because of your uncertainties if we went ahead and authorized the survey at this time?

Colonel SCHEIDENHELM. A survey report would take, I would suppose, a year or maybe more. The result of a survey report would then have to wait up until that time. If the results were favorable for Federal development—and I take it that would be a question to be answered by the Army—then there would be the issue up at that time should the Federal Government build it or not, and it would just throw the whole question on the table again.

Now in the meantime the company, instead of proceeding on the assumption that if it can get things together as it now believes it can and it is willing to proceed on that basis—it cannot any longer do that because there is thrown up the question that after all, maybe the Federal Government will seek to construct this.

Mr. BALDWIN. It does not seem to me that that question is much different than the question right now.

Colonel SCHEIDENHELM. Possibly, I am frank to say that the question before the committee is essentially whether the committee prefers to have this developed privately and in a much larger way, without cost to the Federal Government. The flood control aspect is just the same. There is just the same kind and amount of flood control.

Mr. DAVIS. Mr. Becker, have you anything more?

Mr. BECKER. No. I would like to say in my history here on the power question that it is the first time in my years of serving on this committee that there has been such an indefinite position taken by a private company as to what they want or do not want. I would certainly wish they would come before us with a definite position that they are opposed to the survey, or are going ahead with their own project, and give us a definite answer on it. I think it would solve a lot of our questions here, and save a lot of time.

Mr. DAVIS. That is right. It is the first time I am impatient, but I am impatient with this situation.

Mr. BECKER. I must say that to the chairman. It is the first time I have seen him become impatient.

Mr. BURNSIDE. Does the company intend definitely to build this dam?

Colonel SCHEIDENHELM. That is certainly the intention.

Mr. BURNSIDE. We have the other two gentlemen here now. Is that your position?

Colonel SCHEIDENHELM. I suggest you ask Mr. Turner.

Mr. BURNSIDE. Can we ask him now again? Is that definitely your position?

Mr. TURNER. May I make just one short statement, in the hopes of clearing up this particular thing? I think that our position before your committee is this: We had hoped to persuade you that we were making a bona fide, serious effort to get this job under construction. We fully expect we will be able to. I think we would have no business in opposing the committee if it should feel the sensible thing to do is to have this additional survey made. We would feel if it were

made it would be bound to have an effect to still further delay the making up of our minds on this thing.

I want to point out that the economics of the project are very marginal. Anything that will better it is of interest to us. We want to be sure when we build it that the money we spend is spent wisely. We are obligated to from the standpoint of the people who provide the money.

On the point of the license, it would certainly be helpful to us if we did not have to proceed under a Federal license, but we will certainly make up our minds whether or not we think we should immediately go for a license or shall not go for a license within the next 6 months.

As I indicated to you, that is only one of the questions. We are trying to get these other questions resolved and we feel they will be resolved, and we feel we will make up our minds on the remaining points very shortly.

As I indicated to you, we hope and expect that this project will be underway within the next year, or at the most 2 years. I do not know whether that has been helpful in trying to clarify this or not.

Mr. BECKER. Now the gentleman is opposing the survey on the ground that it would interfere with their making up their minds as to whether or not they should proceed and spend more money on the project themselves. Why did the gentleman not say that before? I mean, at least you are saying you oppose the survey on those particular grounds, and I think that is legitimate. But why not say that before and save all of this time here? It was very simple to say, and Mr. Jones was trying to bring it out.

Mr. TURNER. I am sorry, and it must be because of the awkwardness with which I said it. I am not an expert in these appearances.

Mr. BECKER. I think you were trying to be cagey. I am not trying to be offensive in saying that, but I think you were trying to be cagey from a legal standpoint, and we do not like you to be cagey, but want you to be frank and open. Then we can make up our minds and it is very simple for us.

Mr. TURNER. I do not want to be cagey with you, but it is a tough decision to make and it is a hard thing to decide clearly here at this moment.

Mr. BECKER. I can understand that.

Mr. DAVIS. We will have an executive session on this.

If the committee will bear with me, we have Mr. Burdick here, and Judge Trimble, and Mr. Lovre, and if they will bear with me a little bit, we will get these other projects taken care of and try to get a record made. I think that is all we need to hear on this particular matter this morning.

MISSOURI RIVER FLOOD-CONTROL DAMS—S. 2093

Mr. DAVIS. We will pass to S. 2093, which deals with property damages resulting from construction of flood-control dams on the Missouri River.

Who is going to represent the Corps of Engineers on this? Colonel Penney?

Colonel PENNEY. Mr. Kimbel will testify, with your permission. Mr. Kimbel is special counsel, Chief of Engineers.

Mr. DAVIS. Mr. Kimbel, will you come up and give your full name to the reporter, please?

STATEMENT OF JOSEPH W. KIMBEL, SPECIAL COUNSEL, CHIEF OF ENGINEERS

Mr. KIMBEL. My name is Joseph W. Kimbel, special counsel, Chief of Engineers.

Mr. Chairman, the position and views of the Department of the Army on S. 2093 were set forth in a letter of February 2, 1956, addressed to you. If you wish, I can read that letter into the record, and if not, you already have it and it can be placed in the record.

Mr. DAVIS. We already have it. Will you just state what it includes?

Mr. KIMBEL. In brief, the position of the Department is that it has no objection to section 1 (a) (1) of S. 2093, which would provide for payment to persons having improvements on land such as Indian reservations and railroad rights-of-way, where they do not have any ownership in the land or any vested leasehold interest; and where they are in there under an informal permission. Having no interest in the realty, the Comptroller General held we could not pay them for their improvements when we take the land for a reservoir project.

We feel that they are entitled to some equitable payment and this section would provide it, and we have no objection to it.

Section 1 (a) (2) deals with the Pollock, S. Dak., independent school district, and the situation there is that the appraised value of the present school building is $200,000. This bill would provide for payment of a sum not to exceed $400,000 for the building of a new school building, which admittedly would cost more than the $200,000 appraised value of the present building.

The Department, under the normal practices, can legally pay only the fair value of what is being taken from the property owners of the school district in this case. So under existing law we could only pay them $200,000, it is our feeling.

Mr. DAVIS. But the Senate bill provided——

Mr. KIMBEL. The Senate bill provided that we pay the actual cost of a new school not exceeding $400,000. The Department has taken no position on whether or not the Congress should recognize an equity in that case. If they do, it is making an exception from a rule that is applicable in other instances.

Section 1 (b) (1) of the bill provides for the construction of suitable sewer facilities at St. Joseph's Indian School, Chamberlain, S. Dak., at a cost of not to exceed $35,000. Our position is there will be no interference with the discharge of sewage from this sewer since the elevations of the outlets are above maximum operating level of the reservoir and will only be submerged for brief periods during extreme flood stages. Accordingly, we feel there is no basis for the payment provided in this section and the Department is opposed to the enactment of section 1 (b) (1).

Section 1 (b) (2) and 1 (b) (3) provide for sewer facilities at not to exceed $120,000, and water facilities not exceeding $25,000, at Fort Pierre, S. Dak., and sewer facilities at not to exceed $210,000 at Pierre.

These cities are located about 60 miles above the upper limits of Fort Randall Reservoir pool and 8 miles below Oahe Dam. Accordingly, there could be no adverse effect from these projects at either of these locations. The Department is opposed to section 1 (b) (2) and 1 (b) (3).

Section 1 (c) provides for reimbursement of business and industrial firms for expenses necessarily incurred by them in moving to new locations necessitated by construction of Oahe, Gavins Point, and Fort Randall Dams. This letter says we feel that there is no need for this section. However, it is our present feeling there may be some need for this section to take care of the situations which arose during a year's interval when our general authority to pay such costs had been suspended by the Congress. It was revoked and then reinstated insofar as business enterprises were concerned. So this section may be needed to provide for a reimbursement of business interests, plus moving, which was done during that 1-year interval when the general law on the subject was not in force.

I think that about completes it.

Mr. DAVIS. If the committee will wait for just a moment, I understand Senator Case is on the way. He is very interested in this matter, but we also have our own colleague, Mr. Lovre, here.

You can stay where you are, Mr. Lovre, and give us at word on what the background is of this Senate bill, and what brought it on.

STATEMENT OF HON. HAROLD O. LOVRE, MEMBER OF CONGRESS FROM THE STATE OF SOUTH DAKOTA

Mr. LOVRE. Thank you very kindly, Mr. Chairman. In order to expedite matters, I would like to ask permission to have inserted in the record at this point my prepared statement, the statement of Senator Mundt, and also the statement of our colleague, E. Y. Berry.

Mr. DAVIS. Without objection, it will be so ordered.

(The statements referred to are as follows:)

STATEMENT OF SENATOR KARL E. MUNDT (REPUBLICAN, SOUTH DAKOTA)

Mr. Chairman, members of the committee, I am happy to appear before you in support of S. 2093 which was passed by the Senate on July 21, 1955.

S. 2093 is an omnibus public works bill which would authorize the Corps of Engineers to undertake certain public works or to compensate for certaain consequential damages resulting from the construction of the dams and reservoirs as a part of the Missouri Basin project.

In the Flood Control Act of 1944 which authorized the construction of projects on the Missouri River the Congress took a great step forward in stabilizing the economy of the Missouri River Basin and in making many benefits available to them as a result of the dams and reservoirs being constructed. The projects authorized by that act are now well on the way to completion. However, as the construction progressed we found that individuals and communities have been and are being financially damaged through no fault of their own. This legislation would correct the inequities now prevalent and permit those individuals and communities who incurred such damages resulting from the construction of the projects to be reimbursed for such damages.

The Flood Control Act of 1944 did not authorize the Corps of Engineers to compensate individuals for structures which they had erected on Indian tribal lands or railroad rights-of-way by leases, licenses or permits. S. 2093 would correct this situation and permit the Corps of Engineers to compensate such permit holders for losses sustained as a result of the construction of such projects. It would permit the Corps of Engineers to negotiate settlement with

individuals such as the owner of the general store and others at Fort Thompson, an Indian settlement, which is being inundated. It would permit the Corps of Engineers to negotiate settlement with those who have constructed grain elevators on railroad rights-of-way which are being inundated.

I feel that these people are entitled to settlement since through no fault of their own they find their small businesses which they have built up during the years completely destroyed. Under present authorization they have no recourse to take to seek recompensation for damages incurred. This legislation would correct that situation.

This bill when enacted would also permit the Corps of Engineers to compensate the town of Pollock, S. Dak., which is being relocated because of flooding of its present site, for its school. The original authorizing legislation contained limitations which make it impossible for the Corps of Engineers to compensate the town for the school. We all recognize the need of educational facilities in any community and this bill will permit the engineers to fully compensate the community for the relocation of its school facilities.

Other provisions in the bill authorize the Corps of Engineers to negotiate settlement with communities and institutions for damages to their sewer and water facilities which are caused by the construction of the dams. It is essential to the health standards of the institutions and the communities that this authorization be made at an early date so the necessary repair work can be done expeditiously to meet the needs of the people involved.

This legislation does not call for the appropriation of any additional funds. Costs incurred by the Corps of Engineers are to be borne by funds appropriated for the construction of the dams themselves. The Corps of Engineers has made an excellent record on these projects and are completing the projects for less dollars than earlier estimated. Some appropriation funds have been turned back to the Treasury from both the Fort Randall and the Gavins Point projects. From such surplus funds moneys could be obtained to meet the costs of projects authorized by this legislation.

I thank the committee for its considerations.

Testimony of Harold O. Lovre, Member of Congress

Mr. Chairman, H. R. 7561 is a companion bill to S. 2093, which was introduced by Senator Case for himself and Senator Mundt, both of South Dakota, and which passed the Senate last July 21.

First, Mr. Chairman, I want to express my appreciation to you for scheduling this hearing not only on the bills referred to, but also on H. R. 8743, which I introduced last January 24 and which relates solely to the Pollock Independent School District problem.

Mr. Chairman, S. 2093 is in the nature of an omnibus bill taking care of numerous equity cases arising out of the construction of the Missouri River Development program for which no compensation or authorization is provided for by law. The omnibus approach was taken in order to simplify the legislative procedure; thereby eliminating the introduction of numerous individual bills. Report Number 1032, accompanying S. 2093, is made a part hereof, by reference.

COMPENSATION FOR LESSEES AND PERMITTEES

The Corps of Engineers informs us that they are authorized to acquire property that would be flooded by the dams and reservoirs in connection with the Missouri River Development program, but they state there is no legal basis for payment to a permittee or lessee in a situation where there is no vested interest in the real estate itself. A large portion of the area required for the reservoirs consists of Indian tribal lands. Other minor areas consist of town sites, where buildings and structures such as elevators, oil stations, and the like have been erected on railroad rights-of-way by easements. This bill recognizes that any bona fide lessee or permittee owning improvements situated on a railroad right-of-way or on tribal lands should be compensated at the fair value of such improvements which are destroyed as a result of the construction of the river program.

It is my understanding that the Bureau of the Budget and the Secretary of the Army agree with this provisions of the bill.

POLLOCK INDEPENDENT SCHOOL DISTRICT

The reservoir of the Oahe Dam will completely inundate the town of Pollock, which is located upstream from the Oahe Dam. The town has been moved to a new townsite and the old town is being abandoned. The school building, which was built in 1937 and which adequately takes care of all the needs of the school children of the Pollock Independent School District, will be completely flooded and destroyed by the Oahe Reservoir. The Corps of Engineers has assessed the present value of the school building at $200,000, and we are told that this appraisal is based upon the cost of reconstruction, less accrued depreciation, plus the current market value of the site. We are told further that $200,000 is the maximum that the Corps of Engineers can pay.

The school board cannot replace this building for less than approximately $400,000. The school board could bond the district to the limit and that, together with what the Corps of Engineers offers, would not come anywhere near replacing the building which the Government is now destroying. This being true, Mr. Chairman, the Pollock Independent School District is strictly at the mercy of the United States Government. All three bills referred to herein allow the Government to absorb the difference between what the corps claims it can pay and the estimated cost of a new building.

Mr. Chairman, there is precedent for this legislation, and I refer to the school case at Newton, N. Dak. in 1953. The total appraised value of the schools at Sanish and Van Hook was $162,500. The Congress, however, in the supplemental appropriations bill for fiscal year 1953, Public Law 547, 82d Congress, provided for the expenditure of up to $450,000 for the planning, construction and furnishing by the Corps of Engineers of new school facilities to replace those in the villages of Sanish and Van Hook, N. Dak., which were destroyed by the Garrison Reservoir project. In all fairness, Mr. Chairman, the Government certainly should replace that which it destroys, by virtue of this construction program.

REPLACEMENT OF SEWAGE FACILITIES

The bill also provides for compensation to the Saint Joseph's Indian School, in an amount not exceeding $35,000, for sewage facilities; to Fort Pierre, not exceeding $120,000 for sewage facilities and $25,000 for water facilities; and to the city of Pierre, not exceeding $210,000 for the purpose of providing suitable sewage facilities conforming to applicable standards of the South Dakota Department of Health. The Government refuses compensation in all three cases. In refusing compensation, the Government says, generally, that the construction of the Fort Randall Dam does not in any way interfere with the existing sewage disposal facilities at the places mentioned.

Mr. Chairman, it must be remembered that for years these places have used the Missouri River for the disposal of their sewage. The river has been a swift moving river and cities and institutions along the river never have experienced any trouble in using the river for their disposal of sewage, and the use of the river for that purpose has never been questioned by the State board of health or any other governmental or State agency of any kind. The river is now being changed from a swift, unregulated flow of water to a regulated flow, including a chain of deep lakes extending from South Dakota, through North Dakota and into Montana. As a result of the change in the flow of the river and the creation of large lakes, the Department of Health of South Dakota, in the interest of safety has notified the places in question to initiate immediate plans for the installation of adequate sanitary sewage treatment facilities. The demand for improved sewage disposal facilities is a direct result of the Missouri River construction program, and if it were not for this program, these cities and institutions would continue to use the river for the disposal of their sewage. It is true that the program will bring many benefits, including navigation, irrigation, hydroelectric power, and recreational facilities, but it is to be remembered that these benefits will accrue to the public generally, and certainly the public generally should compensate the cities for the damages sustained by virtue of the construction program.

The Corps of Engineers has objected particularly to the projects at Fort Pierre and Pierre for the reason that these cities are located about 60 miles above the upper limits of the Fort Randall Reservoir and pool and 8 miles below Oahe Dam. This is true, Mr. Chairman, but it must be remembered that Big Bend, which is also authorized and which is a part of the Missouri River program, will undoubtedly be constructed shortly. This dam will be lo-

cated between Fort Randall and Oahe, and when constructed will undoubtedly back water up to the cities in question.

I also want to call the committee's attention to the fact that the existing sewage facilities at the Saint Joseph's Indian School at Chamberlain were damaged by construction of certain riprapping by the Corps of Engineers and the school has had trouble with their sewage disposal ever since. This school, Mr. Chairman, which is a charitable institution with no endowments, cares for the poor and orphaned children of the Indian reservations and is supported completely by charity.

This bill recognized the inequity that now exists and provides for a combination approach to the problems, rather than individual bills to take care of these individual problems. The bill protects the Government's interests and provides for the most economical, yet fair, methods of settlement in the cases involved in the huge Missouri River Basin program. This bill also provides no further burden on the budget, but provides that the sums to carry out the provisions of this act shall be obtained from funds appropriated respectively for the Fort Randall and Oahe Dam and Reservoir projects, and does not involve new money.

STATEMENT OF REPRESENTATIVE E. Y. BERRY

Mr. Chairman and members of the committee, I wish to go on record before your group as joining with the other members of the South Dakota congressional delegation in urging enactment of S. 2093. As you know, this measure authorizes the Secretary of the Army, through the Corps of Engineers, to undertake certain public works or compensate individuals or firms for damages resulting from the construction of dams and reservoirs as part of the Missouri River Basin project.

S. 2093 would provide urgently needed relief in two instances in which I have introduced special legislation. One of my bills, H. R. 4117, would authorize the construction of a sewage-treatment plant to serve the Saint Joseph's Indian School at Chamberlain, S. Dak. Saint Joseph's School is an orphans' home and school, operated by the Bureau of Catholic Missions. I have had a great deal of correspondence with Rev. Peter M. Miller, S. C. J., director of the school, in an effort to work this problem out administratively, but it appears that the only relief is through legislative action.

Approximately $35,000 is required to provide an adequate sewage-treatment plant to replace the existing one which was damaged during construction work. The school has been placed in this position through no fault of their own, and as a charity organization, would have a great deal of difficulty raising this money. I strongly recommend, therefore, favorable action on this item.

Another measure which I introduced, H. R. 5994 for the relief of Eugene Licht, would be taken care of by S. 2093. My bill authorized the Secretary of the Treasury to pay Mr. Licht the sum of $9,000 for reimbursement of expenses incurred by him in relocating his grain elevator at Wakpala, S. Dak. This move was necessitated by the relocation of the railroad tracks to which his elevator was adjacent. I am attaching a copy of an affidavit from Mr. Licht outlining the problem in detail. The original of this affidavit was filed with the House Judiciary Committee to which my bill was referred.

S. 2093 as amended in the Senate would authorize reimbursement to business and industrial firms for expenses incurred in moving to new locations, and would provide the relief needed by Mr. Licht and others facing similar circumstances.

Another item of particular interest in my district would provide funds for sewer and water facilities at Fort Pierre, S. Dak. It has always been customary to use the Missouri River for sewage disposal. Now, following construction of the dam, a large fresh-water lake will be created, and continuing present methods of sewage disposal would be a health hazard. The State health officer has been demanding immediate action on the part of the city, and I am attaching a copy of a letter from the Mayor of Fort Pierre, F. R. Fackelman, to Dr. G. J. Van Heuvelen, State health officer, dated May 31, 1956, stating that they are financially unable to take care of this matter at this time, and are relying on passage of S. 2093 to provide the funds necessary. Mayor Fackelman also outlines some of the reasons why passage of this is urgently needed.

Although I have emphasized some of the provisions in this legislation that would benefit my district, I strongly endorse the remaining items, also. The

problems at Pierre are very similar to those at Fort Pierre. Certainly the town of Pollock has already experienced a great deal of difficulty as a result of the Missouri River program, and the school district should not be required to pay the costs of reestablishing and relocating their school facilities.

I sincerely hope the committee and the House will follow the action of the Senate in passing this legislation without delay to correct the existing inequities.

Thank you for the opportunity of presenting my views.

AFFIDAVIT

STATE OF SOUTH DAKOTA

STATE OF SOUTH DAKOTA,
County of Brown, ss:

Eugene Licht, being first duly sworn upon his oath, deposes and states:

That he is the owner of a grain elevator and coal sheds attached, located at Wakpala, Corson County, S. Dak., and has operated such business for a number of years.

That because of the construction of the Oahe Dam, the water in the Missouri River bottom will be some 30 feet deep at the point where the main line of the Chicago, Milwaukee, St. Paul & Pacific Railway Co. crosses such Missouri River. That Wakpala is located on a tributary of the Missouri River, known as Oak Creek and that at the present time the railroad follows up Oak Creek bottom after crossing the Missouri River. Because of this river crossing at this point, the Army Engineers, under whose supervision the Missouri River construction is being carried on, will move the location of the railroad bridge and reroute the railroad bed around the town of Wakpala.

That the grain elevator owned by this affiant is located on railroad right-of-way in the town of Wakpala, and when the railroad is moved it will render the business and property of this affiant practically worthless. That the function of a grain elevator in this section of the country is to buy grain in the community and ship such grain. That since this business is located on the railroad right-of-way cars are loaded out of the elevator. To haul the grain from the elevator to the relocated right-of-way would make the shipping of grain almost prohibitive. In fact, the relocation of the railroad without relocating affiant's elevator to the new rail right-of-way will practically confiscate affiant's business.

On October 1, 1954, affiant received a letter from Col. Daniel A. Richards, executive officer of the Corps of Engineers, which reads in part as follows:

"Hydraulic studies are now being made in this office to determine what effect, if any, the reservoir will have on Wakpala and flood stages in Oak Creek should a flood occur during high reservoir stage. This study will also include the effect of aggradation or silting of the Oak Creek Channel on flooding. These studies will be completed at the earliest possible date and you will be advised of the results and any action contempated by the Corps of Engineers in connection with Wakpala. It is anticipated that several months will be required to complete the studies since additional field surveys will probably be necessary.

"Present construction schedule and reservoir filling forecast indicates that it will be at least 8 years before the pool will extend to the vicinity of Wakpala.

"In connection with your grain elevator business you may be interested in the proposed relocation of the railroad. It is contemplated that the line will be moved approximately 1,500 feet west of its present location to obtain satisfactory alignment and grades for relocating that part of the railroad which will be flooded by the reservoir in the lower reaches of Oak Creek and not because of conditions at Wakpala."

On January 31, 1955, affiant was advised by Colonel Richards in part as follows:

"These studies have now been completed and indicate that the Oahe project will not aggravate the local flooding conditions on Oak Creek. As a result of these studies it is not contemplated that any business, residential or community property in Wakpala will be required for project purposes."

On February 24, 1955, Col. T. J. Hayes, district engineer, Corps of Engineers, had this to say, in part:

"It is to be regretted that the relocation of the railroad will leave Mr. Licht without rail service. The Corps of Engineers would be within its authority to reimburse him for this loss if the land on which his elevator is located was needed for the project or was to be flooded. The effect of moving the railroad undoubtedly causes a damage to Mr. Licht's property, but it has long been established by the courts that such damage is indirect and not one directly resulting

from the construction of the dam. This interpretation of the courts precludes any payment by the Corps to Mr. Licht, and it is beyond our authority to provide relief however deserved. Cases of this type usually are resolved by legislative appropriation."

Affiant then contacted two engineering firms with a view of ascertaining the cost of removing the elevator to the new rail location, and on March 13, 1955, had a letter from Ray S. Johnson of the Johnson & Sons Construction Co., 402 South 7th Street, Aberdeen, S. Dak., which is in part as follows:

"I have figured that this job can be done for about $18,000 by using the equipment that is now in the elevator.

"We can't tell just how much the loss of material will be, which will have to be replaced by you."

On March 12, 1955, affiant received a letter from I. F. Hartung of the firm of All-States Engineering Co., Aberdeen, S. Dak., which is in part as follows:

"I have figured that it would be just as cheap building new, on account of breakage, loss of lumber, and cost of transporting lumber. In building new, an elevator of the same size and capacity, it would cost approximately $20,000 for labor and material, less the machinery which would be taken from the old elevator and reused."

Affiant also contacted the railroad company and was advised by their attorney that the railroad company had no responsibility in regard to the relocation of his business. He said that they were not responsible for any loss that affiant might have by not being able to get grain cars and that affiant's lease, which is on an annual basis, can be cancelled on 30 days' notice.

That the Oahe Dam is one of a series of large dams being constructed on the main stem of the Missouri River for the purpose of preventing property damage in the lower reaches of the river from flooding. That the property to be protected is property very similar to the property of this affiant which the Army Engineers and the Government propose to confiscate for protection downstream. That by virtue of rendering this property of affiant valueless, affiant stands to lose a large part of his life savings and the source of his present income. Affiant cannot believe it is fair or just or reasonable to confiscate his property by rendering it valueless, for the sole purpose of protecting the property of someone else in another section of the Missouri River bottom.

Affiant would be willing to stand a portion of the cost of such relocation of his grain elevator and business, but he is not in financial condition to stand the entire cost. Unless he is given some assistance through legislation, as advised by the Army Engineers, he will be put out of business. Affiant therefore asks that the Congress appropriate $9,000 to apply on the cost of moving and relocating his elevator and coalsheds to the new railroad right-of-way. Affiant will stand the balance of the cost of such removal in order that he may remain in business.

_____

Subscribed and sworn to before me the _____ day of _____, 1955.

_____,
Notary Public ,South Dakota.

My commission expires _____

MAY 31, 1956

G. J. VAN HEUVELEN, M. D.,
State Health Officer and Chairman,
South Dakota Water Pollution Committee,
State Department of Health, Pierre, S. Dak.

DEAR DR. VAN HEUVELEN: This will acknowledge receipt of your letter dated April 28, 1956, wherein you again notify the city of Fort Pierre that primary treatment should be provided for the sanitary sewage before discharge into the Missouri River and that the city dump on the Missouri River should be abandoned, both of these requirements to be completed on or about the time of closure of the Oahe Dam.

As you probably know, we have had pending in Congress legislation which would provide Federal aid in providing primary treatment for sewage before discharge into the Missouri River. Senate bill 2093 passed the Senate during the last session of Congress and by its terms provided and authorized the use of existing appropriations to provide $120,000 for water facilities and $25,000 for sewage facilities. During consideration of this bill we presented the following facts in support of such legislation:

1. Severe damage caused by the flood of 1952 to all city facilities requiring the expenditure of large sums of money to maintain such facilities at a minimum.
2. The rapid and large influx of people into this area because of the Oahe Dam construction.
3. The fact that the city of Fort Pierre is now bonded to the limit to take care of its increased population.
4. The topography of this area makes a lagoon type of sewage plant not feasible.
5. The condition of city finances is very low.

I think you will agree that under our present financial situation we are absolutely unable to comply with your recommendations until such time as Federal aid is forthcoming. Consequently, we will appreciate any help you can give us in bringing about final passage of Senate bill 2093.

With best wishes, I am

Sincerely yours,

F. R. FACKELMAN,
Mayor, City of Port Pierre.

Mr. LOVRE. S. 2093, Mr. Chairman, is really in the nature of an omnibus bill, taking care of a number of equity cases arising out of the construction of the Missouri River development program. We have taken this approach, Mr. Chairman, in order to facilitate matters on this committee. We could introduce separate and individual bills, but we did not think that would be necessary if we used the omnibus approach.

This bill was passed by the Senate on July 21, 1955. Immediately after the passage of the Senate bill I introduced H. R. 7561, and at that time it was so late in the Congress it was decided that it should go over to this session for 2 months.

I do want to state this: That as the previous witness mentioned, the Corps of Engineers has authority to pay for damages where there is a vested interest, but where there is no vested interest then the Corps of Engineers is without authority to make any payment whatsoever.

The Missouri River program is a tremendous program and we have a map here that I would like to call your attention to, just so that the committee can better follow this omnibus bill.

The program starts, Mr. Chairman, where the Missouri River empties into the Mississippi River. Then it proceeds north and west through the States of Missouri, Kansas, Nebraska, Iowa, South Dakota, North Dakota, and then also up into Montana. You will notice that the project itself is made up of numerous dams and reservoirs. There is a chain of lakes starting up here with Fort Peck and Garrison Dams and then in the State of South Dakota we have Oahe Dam, which is the largest dam of all. It will create a reservoir that will back up north approximately 200 miles. Oahe is under construction and is about 15 percent completed, or thereabouts. Then we also have in our State Fort Randall Dam, which is another large dam and which is completed for all intents and purposes. There you also see the reservoir which is tremendous in size.

Then we have Gavins Point Dam, which is another dam on the border between South Dakota and Nebraska, which has been closed and which is also completed for all intents and purposes.

Going downstream, of course, you have river stabilization. These various reservoirs, Mr. Chairman, will take in a considerable amount of land, including Indian tribal lands, that is, lands held in trust. It also includes various railroad rights-of-way and townsites. We have a number of cases, or I should say we have a few cases where property

owners have businesses on these railroad rights-of-way, on tribal lands. This provision we have in this bill is to give the Corps of Engineers the authority to reimburse those owners in those cases where the fee simple title is not in the owner of perhaps an elevator, or something else.

Mr. DAVIS. What would be the overall cost of your bill?

Mr. LOVRE. The overall cost of this particular section——

Mr. DAVIS. Everything included in Senator Case's bill, S. 2093. What would the entire cost be?

Mr. LOVRE. This is strictly a guess on my part. I doubt if it would exceed $1 million. That is strictly a guess. But we have the next provision then with reference to the Pollock school district. There we certainly have a case which warrants a great deal of sympathy. A little town will be completely inundated and flooded by the Oahe reservoir. It will be completely wiped off the map. That town is now being moved to a new townsite. The removal is about 90 to 95 percent complete. We have a school building there that will be completely destroyed.

As the witness has mentioned, the Corps of Engineers is only authorized to pay the depreciated value. It is my understanding that the appraisal is determined by the reconstruction cost less the depreciated value, less the current market price.

The Corps of Engineers in this case comes up with a figure of $200,000. We have a witness here to testify on this. This $200,000, Mr. Chairman, under today's costs will not begin to rebuild this school district.

Mr. DAVIS. It will take close to $400,000.

Mr. LOVRE. Yes, it will. And may I say this to the chairman, you could take this $200,000 and take every dime this little independent school district could bond itself for and still they could not provide those kids up there with the school building that is being destroyed by virtue of this program.

Then going into the other features of the bill, there is one that deals with reference to authorizing the Secretary of the Army through the Corps of Engineers to furnish water facilities and sewage facilities, first to the St. Joseph's Indian School at Chamberlain, which is a Catholic institution doing a tremendous job with no endowments, and supported only by donations and charity. They have roughly 250 Indian children. By virtue of this construction they interfered with the sewage disposal system of the school. We are asking here $35,000, which means so much to this particular school. They do not have the money with which to patch it up and furnish sewage facilities in conformity with the standards of the department of health.

We also have a similar condition at Fort Pierre, and also our capital of Pierre. I know what the Corps of Engineers stated in its report to you, Mr. Chairman. They say they deny responsibility on the grounds that this construction program does not in any way interfere with the various sewage disposal plants. May I say this to you, Mr. Chairman:

Since these various towns were organized, the cities have dumped their raw sewage into the Missouri River without any objection from any legal entity of any kind. Now with the construction of these tremendous reservoirs, the flow of the river is going to be completely

changed. Before we had a swift, uncontrolled river. Now we have a regulated river with lakes with clear water in them. The Health Department now comes up and says, "Mr. Mayor of Pierre, it is necessary that you improve your disposal system because of the change in the river conditions."

At this point, Mr. Chairman, I ask permission that we may place in the record a letter from the State Department of Health dated February 16, 1956, addressed to Mr. Art Munck, mayor of the city of Pierre, S. Dak., which states in substance:

In view of the increased recreational potential because of clearer waters resulting from the closure of Oahe Dam, it is mandatory that the city of Pierre initiate immediate plans for the installation of adequate sanitary sewage treatment facilities.

I also ask permission at this point to have inserted in the record a letter I received from St. Joseph's Indian School, from Father Peter M. Miller, superintendent of the school, dated June 1, 1956.

Mr. DAVIS. Without objection, they may be made a part of the record at this point.

(The letters referred to are as follows:)

SOUTH DAKOTA STATE DEPARTMENT OF HEALTH,
Pierre, S. Dak., February 16, 1956.

ART MUNCK,
Mayor, City of Pierre, S. Dak.

DEAR MAYOR MUNCK: The City of Pierre has received previous notification from the South Dakota Department of Health and the South Dakota Water Pollution Committee advising that primary treatment should be provided for the sanitary sewage before discharge into the Missouri River, and that the city dump on the Missouri River should be abandoned, both of these requirements to be completed on or about the time of closure of the Oahe Dam. The purpose of this letter is to reemphasize the need for primary sewage treatment in view of developments since our previous communication.

1. With the closure of Garrison Dam in North Dakota, downstream waters carry much less turbidity and recreational use of the waters is increasing. A board of engineering consultants have studied the river immediately below Garrison Dam in North Dakota (Mirgain, Schroepfer, and Riddle—Report on Effect of Missouri River Reservoirs on Sewage Facilities at Mandan and Bismarck, N. Dak.—January, 1956). On page II–8 of this report appears a statement "but since the reservoir and the tamed river will now tend to attract more sportsmen and tourists the practice of discharging raw sewage will no doubt have to be stopped".

2. With the closure of Randall Dam, downstream waters have cleared and fishermen have been enjoying astounding catches. Mr. James Shields, impoundment biologist, reports on Sauger fishing in Fort Randall tailwaters in South Dakota in the South Dakota Conservation Digest, January, 1956. An excerpt of his report states, "Calculations based on interviews with 2,003 fishermen during the period April through November, 1955, reveal that about 31,000 tailwaters fishermen caught 82,000 fish, 25,350 of which were sauger. Fishing for sauger reached a peak in November with 33 fish per 100 hours, and was lowest in July with 13 fish per 100 hours. Total catch for all species varied from 45 fish per 100 hours in November which is excellent fishing according to State or National standards." Mr. Shields further reports in a letter of February 8, 1956, that while utilization of the stream below the tailwaters has increased manyfold since dam construction, utilization is still light due to lack of access and the attraction of tailwaters area. He further reports that the water is clear for many miles below the dam and that the construction of Fort Randall Dam has converted a considerable downstream stretch of the Missouri River from a muddy undesirable area to a clear water river with considerable potential for fishing and recreation. During the water pollution committee meeting on January 30, Mr. Peterson, director of department of game, fish and parks, also indicated that the water below Fort Randall had cleared for many miles and was a potential recreational area.

3. Pierre is located just a few miles below Oahe Dam and is discharging raw sewage to the Missouri River. The Pierre Indian School is located just downstream from Pierre on the Missouri River and heretofore has been discharging raw sewage to the river, but a contract has already been signed by the Bureau of Indian Affairs to provide for adequate sewage treatment. Just a short distance down the river from the Pierre Indian School is Farm Island State Park and the Pierre Country Club is developing a new golf course and club house on this area and have in the planning stage a boat dock and beach facilities on the river. Based on observations of references above referred to relative to the downstream waters below Randall Dam and below Garrison Dam, there is every reason to believe that with the closure of Oahe Dam there will be essentially clear waters going by Pierre in the Missouri River. The increased recreational potential of this stream, due to the closure of the Oahe Dam and the resultant clear waters, will certainly obviate against the discharge of raw sewage or the maintenance of dumping areas along the river banks.

In view of the increased recreational potential because of clearer waters resulting from the closure of Oahe Dam, it is mandatory that the City of Pierre initiate immediate plans for the installation of adequate sanitary sewage treatment facilities.

Yours very truly,

G. J. VAN HEUVELEN, M. D.,
State Health Officer and Chairman, South Dakota Water Pollution Committee.

ST. JOSEPH'S INDIAN SCHOOL,
Chamberlain, S. Dak., June 1, 1956.

Representative HAROLD O. LOVRE,
House of Representatives,
Washington, D. C.

DEAR REPRESENTATIVE LOVRE: Two hundred and fifty poor Indian boys and girls from the reservations of North and South Dakota and the State of Montana are watching with me, as they have watched in the past, the deliberations on bill S. 2093. Their watchfulness included prayerfulness, since this bill concerns a fundamental facility at St. Joseph's Indian School.

Our sewage disposal system has not been functioning since the Corps of Engineers proceeded through the area in their development of the Missouri Basin. With words of description and accusation, with photographs, the entire situation was introduced to the people who could effect the proper justice so necessary. Since St. Joseph's Indian School is a charitable institution with no endowments, and since it cares for poor and orphaned children of the Indian reservations by the complete dependence upon the charity of friends, it was impossible to provide the necessary funds for sewage facilities.

For this reason, it was determined absolutely necessary to seek redress from the United States Government. We have been granted the encouragement of our State Congressmen to seek justice for our boys and girls. Rising costs since the time the request was initiated, have increased our damages somewhat, but at the present time we have reached an impasse.

The State of South Dakota is insisting upon immediate repair of our facilities and we have not as yet received the necessary funds from the Government. We ask your immediate help in this regard. May we hope to hear from you and the Members of Congress in time to take up this work before the weather again makes it impossible to go ahead.

Please accept my personal greetings and a sincere word of appreciation for all that you, your fellow Congressmen, and your associates are doing for our Indian children here at St. Joseph's Indian School.

Cordially yours,

PETER M. MILLER, S. C. J.

Mr. LOVRE. The last part of the bill, Mr. Chairman, relates to reimbursing business and industrial firms for expenses in connection with moving one business place to another. I understand that the Corps of Engineers is not opposed to that, if my understanding is correct.

Mr. DAVIS. Frankly, this is a more all-inclusive bill than I ever dreamed we had here. Of course, Senator Case, as you know, we met at 10 a. m. this morning and we are trying to acommodate these out-of-State witnesses that you have brought here, and which our own colleague has brought. I am wondering if there may not be some questions on both sides about this. I have gotten up to $1,435,000 in my quick calculations, and then you get into this last feature here. I do not know what the cost of this is going to be, and we must be prepared when we get to the floor to take care of this matter. I am just throwing that thought out, as to whether or not we should decide to take more time on this bill.

This would not be a part of our omnibus bill anyway. It will have to be taken up separately. Have you much more there?

Mr. LOVRE. No. That is a bird's-eye sketch of the Senate bill. I am awfully happy that Senator Case is here because it is his bill and he can go into it in more detail.

Mr. Chairman, we do have two outside witnesses, though, who have traveled 3,000 miles, and I certainly hope we can give them ample time to present their testimony.

Mr. DAVIS. You remember you discussed it with me very early in the year.

Mr. LOVRE. That is right.

Mr. DAVIS. And we tried to advance the date of this, but this committee had so many involvements all year that we have just been pushed for time and all of the subcommittees have been competing for time. We have not had a full committee meeting, Senator, in quite a long time. So if we do we will have plenty of business for the full committee with all four of these subcommittees coming in at one time. We are all pressuring one another.

I did want you people to know that we have this matter under discussion and consideration. We may ask you some questions later, but we are very happy to have Senator Case here to explain this project to us. As you all know, Senator Case has served with us for such a long time.

Mr. BECKER. Could we get one thing straight, Mr. Chairman?

Mr. DAVIS. Yes.

Mr. BECKER. In our colleague's testimony he was talking about $400,000 for a school and $35,000 for the St. Joseph's sewerage plant, but I think that our good chairman added that on to the $1 million total which our colleague, Mr. Lovre, has said this bill would involve. However, I believe that is all in the bill and it would all be included in the $1 million.

Mr. LOVRE. It is all in the bill.

Mr. DAVIS. The $435,000 would be a part of the $1 million?

Mr. LOVRE. Yes. Certainly.

Mr. BECKER. I wanted to clarify that.

Mr. DAVIS. I am glad you did, because I thought the first section was $1 million.

Mr. LOVRE. No, sir.

Mr. DAVIS. Very well.

Senator Case, we are very glad to have you here.

STATEMENT OF HON. FRANCIS CASE, UNITED STATES SENATOR FROM THE STATE OF SOUTH DAKOTA

Senator CASE. Mr. Chairman, I certainly appreciate your courtesy in letting me appear. I shall try not to repeat what Congressman Lovre has said, but I think possibly we might simplify our approach to this if I tell you the background of the bill.

Rather than bring in a half a dozen different bills for these individual projects, since they were all occasioned by one fact, namely, the building of some dams on the Missouri River, and since the equity that is involved applies practically to all projects on the same basis, I thought it was desirable to put them in what we called a little omnibus bill and take care of them in that way, rather than having several different hearings on a half a dozen different bills. That was the reason why we put these in here.

The basic point in issue is the question of equity. The Corps of Engineers has the legal authority to compensate for direct damages where they build a structure, and direct damages are involved. They do not have statutory authority for what is called consequential damages. Yet, where citizens of the Government, or public agencies such as a public school district, are injured through no fault of their own, it has been the policy of the Congress to recognize the equity of satisfying claims or making whole citizens or public bodies which have lost rights or suffered losses by reason of the——

Mr. JONES. Will you give us an example of that? You say there is ample percent for that sort of proposition. Will you give us an example of it?

Senator CASE. A precedent would be found in the whole category of claims that are handled as private claim bills. These might have been treated as private claim bills. I would like to take up the individual things, and I think the point will be clear as we proceed to them.

First of all, with respect to that portion of the bill which deals with buildings which are on railroad rights-of-way or Indian reservations. Lest you be disturbed, this is a general bill or that there is a great amount of cost involved, may I say I think there are only 4 or possibly 5 cases that would be involved, involving very small business people. One, for example, on the railroad right-of-way is a farmer's elevator, which, through no fault of its own, has to move because the railroad's right-of-way is being inundated there. Another is a small bulk oil station which serves a town or community of 400 or 500 people. Again they are losing and have the cost of removal.

That is all this bill would do in both of those instances. It would permit the assistance of the Government in paying for the cost of removal.

There is a store which is on an Indian reservation and which has been there for 50 years which, through no fault of its own, has the cost of removal. This bill seeks to make it possible for the engineers to assist them in the cost of removal.

Mr. BALDWIN. May I ask a question, Senator?

Senator CASE. I will be glad to yield.

Mr. BALDWIN. Let us take the first section. I do not see the wording "cost of removal" there. It says, "The fair value * * * of any such improvements." It does not say "cost of removal."

Senator CASE. The cost of removal appears in paragraph (c), where it says, "for the cost of removal." Also in (1) of (a). You are correct there. At that point it speaks of improvements which will be rendered inoperative. I would think, and it was my intent there, that that would be if the property was destroyed, then there would be the same reimbursement that there would be if the property had rested upon patent or deeded land. If it could be removed it would be merely the cost of removal for which the Government should make compensation.

With regard to the school district, the Corps of Engineers does have authority to reimburse the school district for the value of the school as it originally was constructed, less depreciation.

I have some pictures which were the most persuasive thing, as far as the members of the committee in the Senate were concerned, which show the school building involved. Those of us who are familiar with school construction costs will realize that they could not replace that school for $200,000 today. The school district is a very small community and has a limit in their bonded indebtedness, and they simply cannot raise the $400,000 necessary to give them a new school building. Big Government—the United States—says to a little school district, "We will come in and flood out your school building, but we will only pay you the depreciated value of your present building."

That building is in good shape. I was out there a little while ago and I saw this school in this little community and it was in good shape. It is a brick building and it cannot be replaced for $200,000. $400,000 is the estimate of the engineers for it.

The engineers could pay $200,000, but it is going to bankrupt this school district and, in fact, they will not be able to replace it.

Mr. DAVIS. I can see the equity there immediately.

Senator CASE. With respect to the two communities that are losing what we will call, by courtesy, their sewage disposal plants, the Missouri River has been known as the The Big Muddy. Because of the fact that it carried a great deal of silt and was a fairly fast moving stream, communities along there for years had been since the town started putting their sewage in the river, and it was quickly dissipated because of the action of the silt. It was not a clear stream. That is a right they have enjoyed since the towns started in existence.

Now the State board of health comes in and says, with the completion of the dams you will no longer be permitted to use that stream for sewage disposal because immediately downstream from Fort Pierre are the other reservoirs with clear water. The water becomes clear when it is stopped by the dam itself. They say that you cannot do it any more.

The issue was summed up before our committee in the Senate by Senator Hruska of Nebraska, who said "Do you mean these have a right they have enjoyed for 50 years or more that they will no longer be permitted to enjoy by reason of the action of the Government?" I said, "That sums it up and it is the issue here."

I might say in addition to that, when the Corps of Engineers built the first of these dams on the Missouri River they built a town at a cost of $6 million, Pickstown, named for General Pick who was formerly Chief of Engineers. They expected to have to build a town up at Pierre. They were going to build 400 houses at Pierre which

would be a construction town or camp there. The city of Pierre, however, made a special effort to provide housing and to provide community facilities so that they did not have to build a special town at Pierre. They only built 50 houses in the town of Pierre. So the city of Pierre made available its community facilities generally and put on a drive to have houses built so that the Government would save the $6 million which it would have to pay if it had to duplicate its construction camp at Oahe Dam outside of Pierre. As a result the Government has already saved far more than it will cost to help Pierre and Fort Pierre build the sewage disposal plant to replace the right which they have enjoyed there all these years.

Some question was asked about the total cost of the bill. My honest opinion is it will cost in excess of $850,000. I arrived at it in this way. $400,000 for the school replacement at Pollock, of which at least $200,000 or $225,000 would be paid by the Army Engineers in the normal course of events anyway under the old depreciated value system.

Approximately $350,000 for the help to the two cities on sewage disposal. That would be $750,000. Then I have allowed another $100,000—and I doubt if it comes to that—to take care of these half a dozen people or small, not industrial plants, but small businesses and small stores.

Mr. BECKER. If I may interrupt the Senator, the total enumerated in the bill is $790,000. So you need $60,000 by your statement?

Senator CASE. All right, at $10,000 apiece. It would not take $10,000 to reimburse the 2 or 3 stores that had moving costs. These are just small country stores. Part of it was on the Indian reservation.

The little town of Pollock that had to move is a town of slightly in excess of 400. They are not big department type stores but are just little country stores, a filling station and a farmers' elevator. I think the figure of $850,000 would stand up pretty well. In fact, I would be perfectly willing if the committee wanted to do so, to place an overall limitation of cost on it that the total amount available for the appropriation to meet all of the costs in the bill should not exceed $850,000, if you want to place any kind of limitation on it.

Mr. BALDWIN. Senator, concerning these figures under section (b), $35,000, $120,000, $25,000 and $210,000, where it says in each case, "not exceeding" how were those figures arrived at? Were they the estimated cost of the plants completely, or a share of the costs?

Senator CASE. It is a share proposition. The mayor of Pierre, Mr. Munck, is here and he will be able to tell you the cost of the sewage plant proposed for Pierre.

Mr. MUNCK. I beg your pardon. I brought those figures in February when we were in here, and I did not keep a copy, but I left a copy with you and with Congressman Lovre.

Senator CASE. In any event I have them in the file and can supply it. Can I ask Mr. Munck this: Mr. Munck is the mayor and former speaker of the State legislature. Is it true the figure in the bill is less than your estimated cost?

Mr. MUNCK. Our estimated cost as I remember it for the plant itself was $280,000 without the land acquisition which we will have to make.

Senator CASE. And the bill proposes for the city of Pierre not exceeding $210,000 and for the city of Fort Pierre not exceeding

we have a just cause in appearing and asking that the portion of this bill

$120,000 and water facilities of $25,000, or a total of $145,000 for Fort Pierre.

Mr. BALDWIN. Could I ask a question?

Senator CASE. Yes.

Mr. BALDWIN. We are passing more and more rigid pollution bills all along. In fact there is one going through now. I am a little bit curious about the right of cities to discharge sewage into the river and whether that is an inherent right. It is entirely possible, is it not, that without these dams working a hardship, it might still be necessary to construct these sewage plants, because if your State Department of Health is working like California's State Department of Health is, they are sending notices to town after town. There are several in my own district that up to now have been discharging their sewage into the river and they are being required to build their own plants because of more rigid health requirements.

Is it not possible that in the normal order of events the same thing might happen in South Dakota in 2, or 3, or 4 years?

Mr. LOVRE. Mr. Chairman, Mr. Munck, who is the mayor of the city, is here and he is going to testify. I think he will answer that question specifically for you when he does.

Mr. BALDWIN. Fine.

Mr. DAVIS. Such a good job has been done by the Senator and our colleague on this side that I was going to suggest that these two gentlemen place their statements in the record at this point, but if the mayor will come around so that that specific question of Mr. Baldwin's can be answered I think that will be sufficient. Will you come around, Mr. Mayor? We thank you, Senator. You have made it very clear.

Senator CASE. Thank you very much, Mr. Chairman and members of the committee.

Mr. DAVIS. Will you give your full name, sir. If the members will go along with us for 10 minutes additional we will have our former colleague on this committee, Mr. Trimble, present a project and then I want to ask General Itschner a question.

STATEMENT OF ARTHUR E. MUNCK, MAYOR OF PIERRE, S. DAK.

Mayor MUNCK. Mr. Chairman and members of the committee, may I present my written statement?

Mr. DAVIS. Yes, and it will be made a part of the record at this point.

(The prepared statement of Mayor Munck is as follows:)

STATEMENT OF ARTHUR E. MUNCK, MAYOR OF PIERRE, S. DAK.

My name is Arthur E. Munck. I live in Pierre, S. Dak., where I own and operate a lumber company. I am mayor of the city of Pierre. I am also chairman of the South Dakota Water Resources Commission. Having served in the South Dakota State Legislature several sessions, two of them as speaker of the house, as well as 4 years as a member of the South Dakota Legislative Research Council, I have some appreciation of the problems confronting such committees as this.

I appear today in behalf of the citizens of Pierre, S. Dak., as well as for the city commission of Pierre, to plead for the favorable consideration of S. 2093. This bill passed the Senate by an overwhelming vote in the session of 1955 is now before you for your consideration and action. I sincerely believe that

we have a just cause in appearing and asking that the portion of this bill pertaining to assistance in constructing sewage disposal facilities for Pierre be favorably considered.

Ever since the organization of the city of Pierre, our sewers have flowed directly into the Missouri River. Owing to the very heavy silt and sand content of the waters of the Missouri River, sewage is dissipated in a very short distance of flow. The nature of the river, it being so silt laden that no sunlight can penetrate, thus no vegetable life nor living organisms are able to grow. Consequently only scavenger fish can prosper or propagate. Now, with the closing of the Oahe dam, the waters at Pierre will clear up and, due to this change, we are informed by our State board of health that we must install a sewage treatment plant. This we are requested to have in operation by the time the Oahe dam is closed. This will occur within the next 2 years.

It would seem that as the necessity for this sewage disposal plant is brought about and caused by the river work by the Corps of United States Engineers, that there is a definite responsibility on the part of the Government to assist in this matter.

When the Big Bend Dam, which is a part of the river program, is completed our sewer outlets, if left as they now are, will be under water.

We in Pierre are trying to plan ahead to avoid getting caught unprepared. In this I believe we have done a fair job to date. We have saved the Corps of Engineers millions of dollars at the Oahe Dam site by relieving them of having to build a town, such as they had to do at Fort Randall and Fort Peck. We have furnished all utilities such as water, lights, and power. We have supplied schools, hospitals, church facilities, theaters, etc.

This cooperation from the city of Pierre has made this great saving of millions of dollars to the Government possible. Furnishing these many facilities has been of great cost to our city and its citizen taxpayers. We have bonded our city to the limit to provide these necessities and conveniences. Now it would seem that inasmuch as a great share of these costs have been incurred in furnishing these conveniences and saving the engineers the expense of building them that we have a legitimate cause in asking that help be given us in the matter of a sewage disposal plant.

In behalf of the citizens of Pierre I sincerely request you give this favorable consideration.

Mr. DAVIS. Mr. Baldwin has a specific question to ask you, Mayor.

Mr. BALDWIN. I think you heard my question. My question was that our experience in California—and I suppose it is representative of what is happening in every State now—is that the State department of health is becoming more and more rigid in their requirements and is sending towns notices in my own district now that are dumping sewage into the San Joaquin River, stating that they cannot do it any longer and must build a sewage disposal plant.

My question here is, the towns in our district do not have any inherent right to continue dumping sewage. If the Statement department of health says our standards are more rigid and you have to build a plant then they have got to do it and they cannot say, why, they did it for 100 years and that that exempts them from the new requirements.

Is it not possible by this same course of events South Dakota, or all of the other States under the more rigid pollution laws may reach the point, even without these dams, in a matter of a very few years where you could have to build these plants?

Mayor MUNCK. That could perhaps come. I also happen to be a member of the State water pollution committee, and to date nothing like that has been proposed there. This order we got or that our city got from the department of health stated that owing to the clearing of this water we were required to have a sewage disposal plant ready to operate by the time the Oahe Dam was closed. But no orders have been issued to any other city that I know of which has been

running their sewage into the river. Being a member of that committee I would know if such orders have been given.

Mr. BALDWIN. But you would have no way of knowing whether your need for the plant within the next decade might require some control of this type for you, would you?

Mayor MUNCK. No, I have not. You see, with the condition of the Missouri River as it is and has been, silt-laden, the sewage is dissipated in a very short space of flow. In fact, samples have been taken 3 miles below our sewage outlet several times and absolutely no trace of sewage can be found whatever.

Mr. BALDWIN. That is all.

Mr. LOVRE. Mr. Chairman, I think this should be stressed. In Mr. Munck's prepared statement he says:

> Ever since the organization of the city of Pierre, our sewers have flowed directly into the Missouri River. Owing to the very heavy silt and sand content of the waters of the Missouri River, sewage is dissipated in a very short distance of flow. The nature of the river, it being so silt laden that no sunlight can penetrate, thus no vegetable life nor living organisms are able to grow.

In other words, the nature of the river itself before this was of such nature that it was dissipating within a short distance all sewage emptied into the river. It is called the Big Muddy and that is what it was. For that reason they never had any trouble insofar as health is concerned and there was never any objection to any of these cities dumping their sewage into the river.

Mr. DAVIS. Are there any questions?

(No response.)

Mr. DAVIS. If it is agreeable to the committee I would suggest that the statement of Mr. Fred J. Homeyer be inserted in the record, because he comes from the Pollock School District. You and the Senator, Mr. LOVRE, have so carefully gone over that situation that unless there are some additional questions about it we will permit his statement to be filed at this point in the record and conclude the hearing on this subject.

STATEMENT OF FRED J. HOMEYER, APPEARING ON BEHALF OF THE POLLOCK SCHOOL DISTRICT, CAMPBELL COUNTY, S. DAK.

Mr. HOMEYER. Mr. Chairman, I have just a few words I would like to say.

Mr. DAVIS. All right, sir.

Mr. HOMEYER. Mr. Chairman and members of the committee, I have prepared a formal statement which I would like to make a part of the record at this time with your permission.

Mr. DAVIS. Yes. It has already been ordered.

Mr. HOMEYER. In addition I would like to make a part of the record certain photographs of the building which is being taken in this acquisition program.

Mr. DAVIS. That was presented by Senator Case.

Mr. HOMEYER. I have also a plat of the new townsite, where the town is being moved, showing the disposition of the lots and buildings which are now in the process of construction. These new construc-

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tions and buildings which are being moved from the old townsite to the new townsite are shown there.

I might further state that the acquisition program of the Government is now approximately 95 percent complete. By December 31, 1956, it is believed that virtually the whole of the old town will be moved to the new townsite. The new townsite is approximately 1½ miles south of the old townsite. You have this situation where the residents of the old townsite are moving from their former homes but the school building is still there. They have to put up a new building.

It is of the utmost importance that the construction of the new school facilities be commenced just as promptly as possible.

As the chairman has been urged by Mr. Lovre, as I am sure has has, because I bother him with plenty of letters, the expeditious handling of this matter as far as the Pollock School is concerned is of the utmost importance. Thank you gentlemen.

Mr. DAVIS. Will that Pollock School be under the water at all?

Mr. HOMEYER. Not completely. There will be 7 feet of water in it.

Mr. DAVIS. That was my impression. Mr. Lovre has been very active, I can assure you of that.

Now Mr. Smith wants to ask General Itschner one question.

Mr. SMITH. What I wanted to ask the general was this: I did not remember the details of your letter in the testimony earlier. I am not sure of it. How much of this will represent a new precedent in the way of payments on the school and the sewage-disposal plants?

Mr. KIMBEL. Half of the cost of the school actually. The difference between $200,000 and the cost of a new school.

Mr. SMITH. But the payments for the businesses are not a new precedent?

Mr. KIMBEL. It is not a new precedent insofar as the businesses are located on railroad right-of-way and Indian reservations where they have no leasehold interest in the land. There have been individual bills passed heretofore by the Congress to take care of some similar situations. For instance, the Alma Cooperative, I think, at the Garrison Reservoir, had a special bill passed to take care of the grain elevator which was on a railroad right-of-way, and there have been a few instances of that kind heretofore. It is not a new precedent.

Mr. LOVRE. Mr. Chairman, as far as the Pollock School is concerned, that does not establish a new precedent, because back in 1953, by virtue of the construction of the Garrison Reservoir, a like situation arose. In that particular case, which is the city of Newton, N. Dak., the assessed valuation was $165,000, and this Congress provided the Corps of Engineers would have authority to spend up to $450,000 to replace their elementary and high-school building there. So this is not new.

(The prepared statement of Mr. Homeyer is as follows:)

STATEMENT OF FRED J. HOMEYER

The Corps of Engineers is presently engaged in the construction of the Missouri River program for the purposes of navigation, irrigation, hydroelectric power development, and control of floods from Sioux City downstream to the mouth of the Missouri River, under the Flood Control Act of 1944. The reservoirs included in the program create a chain of large lakes extending through South Dakota, North Dakota, and into Montana.

In South Dakota, there are three major dams presently under construction. The Fort Randall Dam is nearing completion and closure of the Gavins Point Dam was effected during the past year. The largest of the dams, the Oahe Dam,

is under construction. The dam site is located immediately upstream from the State capital at Pierre, in central South Dakota, and will create a reservoir of about 24 million acre-feet, extending upstream 200 miles to Bismarck, the capital of North Dakota.

Construction of the Oahe Reservoir will necessitate the relocation or abandonment of the town of Pollock, located in northwestern Campbell County, in South Dakota, about 2 miles south of the north boundary line of that State. The town is being relocated on a new townsite outside the effects of the reservoir, with all its community facilities. Acquisition of the old townsite by the Corps of Engineers has been in progress during the past 2 years and is more than 95 percent complete. With the exception of a few tracts, settlement was made by agreement with the property owners, and on those few tracts where no agreement was reached, condemnation proceedings are pending. For the most part, the Government took possession of the property acquired on December 31, 1955, and in a few cases, the possession date is December 31, 1956. The new townsite is located about 1½ miles south of the old townsite. It was platted by a nonprofit corporation consisting of local residents and more than 98 percent of the lots have been sold to residents of old Pollock, and its trade territory. During the past year, water and sewer facilities have been constructed. A new church was dedicated in May 1956, and another church is under construction. A considerable number of new homes and businesses have been constructed, or are in the process of construction. Some of the residents of the old town have moved their homes to the new townsite, and others are in the process of moving to the new townsite. It is expected that for the most part, the relocation of the old structures will be completed by December 31, 1956. In view of this relocation, it is of dire importance that school facilities at the new townsite be provided as expeditiously as possible.

The Corps of Engineers has authority to make a settlement with the Pollock Independent School District for the school facilities in the reservoir area, but its authority is limited to payment for the depreciated value of the present school building. The present school building is a two-story brick structure, with 25,625 square feet in floor space. It was built in 1937 and is considered adequate for the next 50 years allowing for normal school population increase. Additions and improvements have been made from time to time, and the building is in excellent condition. Under normal circumstances, it could be expected that it would serve the community with little or no additional capital outlay for the next 50 years.

According to the official Federal census of 1940, the town of Pollock had a population of 527. The 1950 census, after passage of the 1944 Flood Control Act, shows a population of 395. It is estimated that the present population is about 400 or slightly in excess thereof. The 1940 school enrollment was 243. The 1950 enrollment was 132, and the 1956 enrollment 175. The decline in the town population and school enrollment from 1940 to 1950 can be explained because of the uncertainty of the future of Pollock because of its inundation. The increase since 1950 can be explained because of the decision to relocate the town and school. Comparable communities in the area have had population increases since 1940 averaging about 25 percent. It can be stated with reasonable certainty from the sale of the lots at the new townsite and the relocation movement now in progress, that the new town and new school will have a population and school enrollment in excess of the 1940 total, when the relocation is complete. This is expected to be a gradual process and will be accomplished over a span of years. There are but 2 high schools in Campbell County; one at Pollock, and the other at Herreid, distant about 20 miles from Pollock.

The Corps of Engineers using their standard methods of determining value, have fixed $200,000 as their settlement figure for the school structure at Pollock. The board of education has employed an architect who has drafted preliminary plans for a new school with comparable floor space and type of construction, and his estimate for the new structure at present-day construction costs is $410,000. A second architect was employed and his estimate of the cost of replacing the school facilities is $437,000. A survey of present-day construction costs on school buildings was obtained from the Department of Public Instruction in South Dakota, and the figures they quote vary from $14 to $18 per square foot. The board of education has met with representatives of the Corps of Engineers on several occasions, and it is conceded that the school facilities at Pollock cannot be reestablished within the limits of the Government offer, but they take the position that they have no legal authority to make settlement above the sum

which they have offered. The Corps of Engineers is acquainted with H. R. 7561 and have advised that they are not opposed to the bill as its affects the relocation of the school facilities at Pollock, and recognize that the amount of their offer is not adequate to replace such facilities.

The Pollock Independent School District consists of the town of Pollock, and one congressional township surrounding the town. It is an agricultural community. The school is operated on funds received from an ad valorem tax on property. The school district is limited in its taxing authority by law, and in common with most school districts in South Dakota, and elsewhere, the operational cost of the school requires the maximum usage of the taxing power to operate the school. The tax on property is at a point where the property owners are paying about as much as the property can stand for the purpose of maintaining local governments. Much of the tax base of the school district is being lost by inundation of the old town and surrounding areas within the school district. It is apparent that the residents of the district for the next decade at least are faced with many uncertain factors in providing funds for the operation of the school, without taking into account the problem of making available additional capital funds for a new school structure.

The inconvenience, hardships, and other manifold obstacles confronting the Pollock people in relocating their town are almost without comprehension. People who have built homes and businesses through years of labor and thrift are being uprooted in the interests of progress, and to protect and make more secure the lives and property of their fellow Americans living downstream. The people at Pollock have faced this situation, created not by their choice, in a realistic manner, and have cooperated wholeheartedly with the Government, acting through the Corps of Engineers. Public relations have been excellent.

This is an equity case. The people at Pollock feel that they are justified in asking that Congress provide adequate funds with which to relocate their school facilities. Their survey shows that the $400,000 sought in H. R. 7561 is substantially the amount needed. If that sum is more than required, the bill is so drawn that a lesser amount shall be provided. If the cost is in excess of that figure, which may be the case, other means must be used to supply additional funds, or the building plans curbed to come within the limits of available funds.

Mr. DAVIS. Thank you very much. If there is nothing further on this we will proceed to the next project.

WHITE RIVER BASIN (H. R. 851)

We will take up H. R. 851, by Mr. Trimble. This is in regard to the White River Basin relating to Lone Rock Reservoir and Gilbert Reservoir. Major Garrett, will you come around and explain the details of this, please?

STATEMENT OF MAJ. FELIX GARRETT, CORPS OF ENGINEERS, UNITED STATES ARMY—Resumed

Major GARRETT. Would the chairman desire that I go into the details of the plan of development and the modifications proposed by H. R. 851?

Mr. DAVIS. I do not think so. You can just summarize it, Major.

Major GARRETT. All right, sir. Well, sir, by the Flood Control Act of 1938 the Lone Rock Dam and Reservoir project was authorized for flood control. It is located on the Buffalo River, which is a tributary of the White River in the State of Arkansas. Since the time of the authorization, further studies have been made by the Corps of Engineers with the idea of giving consideration to the development of the power potential of the Buffalo River. As a result of these further studies a two-dam reservoir plan of development has been developed.

The Lone Rock project would be modified to include power. A project for flood control and power would be built upstream from

Lone Rock at the Gilbert site. This two-dam plan provides for an overall power installation of 120,000 kilowatts initially; one 30,000-kilowatt unit at the upstream plant, Gilbert, and three 30,000-kilowatt units at the downstream plant of Lone Rock.

In 1954 the Chief of Engineers considered this plan and reported on it in connection with the White River survey report. That was published as House Document 499 of the 83d Congress, 2d session, and was considered by this committee. At that time the Chief of Engineers did not recommend the modification of the authorized project because this modification was not economically justified.

Very recently we have reexamined the economics of this project and we find that under the present criteria used in the examination of power projects that the benefit-cost ratio is 0.83 to 1. The first cost of making the modification, using 1956 price levels is $57,064,000. As you know, Mr. Chairman, under our current criteria for power projects, we include an element for taxes foregone an economic cost, that is added to the annual charge. If we did not include taxes foregone the benefit-cost ratio would be 1.1 to 1. That is all I have to present, Mr. Chairman, unless there are some questions.

Mr. BALDWIN. This bill says there will be an addition of $1,600,000 in the total authorization. Is that all that is necessary to accomplish these additional things?

Major GARRETT. Sir, I believe this bill with the $1,600,000 is addressed to the increased authorization of the overall project for the White River Basin.

Mr. BALDWIN. Does this agree with your estimate?

Major GARRETT. The estimated cost of the modification is $57,064,000 at the present time.

Mr. BALDWIN. In other words, the bill in its present form would not be adequate?

Major GARRETT. No, sir.

Mr. DAVIS. You would have to raise it by how much, Mr. Baldwin?

Mr. BALDWIN. If I understand the section 2, it would mean instead of $1,600,000 we would have to insert $57,064,000.

Major GARRETT. Yes, sir. That is the estimated cost of the modification at the present time.

Mr. DAVIS. I have a letter here from Mr. C. Hamilton Moses, chairman of the board of the Arkansas Power & Light Co. He is a very careful businessman, and we all know him in our section of the country. He is a private powerplant operator. He writes as follows:

DEAR CONGRESSMAN DAVIS: I understand your committee will meet shortly in Washington, probably June 8, at which time you will be considering Gilbert and Lone Rock Dams in northwest Arkansas.

I have given much thought and attention to Arkansas River projects for a number of years. I am firmly of the conviction that by the time these two dams can be constructed, both will be economically feasible, and that each dam will pay its own way from the beginning. I know of no proposal in this whole section that will contribute more to the economy and prosperity of that territory and better fit into the overall Federal program of developing our natural resources, than Gilbert and Lone Rock Dams.

As a citizen of Arkansas, and as president of the Arkansas Economic Council-State Chamber of Commerce for the past 10 years, I am greatly interested in what is best for our State and our country.

I urge that your committee appropriate funds for both Gilbert and Lone Rock Dams.

Mr. DAVIS. I have also a letter from Mayor Ed. Ranes of Marshall, Ark., and a telegram from Mr. Harry L. Oswald, executive manager, Arkansas State Electric Cooperative, of North Little Rock, Ark., regarding the Lone Rock and Gilbert Dams which, without objection, will be placed in the record.

(The letter and telegram referred to are as follows:)

CITY OF MARSHALL,
Marshall, Ark., June 1, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control,
House Office Building,
Washington, D. C.

DEAR MR. DAVIS: The authorization of Lone Rock and Gilbert Dams on the Buffalo River in Arkansas for flood control and power is of vital importance to the future economic growth and development of this section of Arkansas.

The reservoirs of these two dams will cover property that is of a submarginal value from the standpoint of agricultural production. The area afforded protection by the flood-control features of these two projects will benefit immeasurably by this construction.

The people who now live in the area which will form the reservoirs of these two dams are not adverse to the construction of the dams but rather have all expressed a very earnest desire to see this construction to be completed at the earliest possible date.

These dams besides furnishing valued flood control and power to the economy of our State will also add a source of water to adjoining towns which in our expanding economy is rapidly becoming critical.

The people affected by the construction of Lone Rock and Gilbert Dams are vitally concerned as this construction appears to be essential to this area to insure its proper development in the economy of Arkansas and the Nation. We sincerely hope that this authorization may be approved by your committee at the earliest possible date.

Respectfully yours,

ED RANES.

NORTH LITTLE ROCK, ARK.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control,
House Office Building,
Washington, D. C.:

Your friends and neighbors in Arkansas Rural Electrification sincerely request and urge that Lone Rock and Gilbert Dams on the Buffalo River in Arkansas be authorized this session of the Congress for both flood control and hydroelectric power. This authorization most important at this time to assure orderly planning of resource development and land conservation in our State.

HARRY L. OSWALD,
Executive Manager, Arkansas State Electric Co-op.

Mr. DAVIS. Judge Trimble, do you have anything to add?

STATEMENT OF HON. JAMES W. TRIMBLE, MEMBER OF CONGRESS FROM THE STATE OF ARKANSAS

Mr. TRIMBLE. Just this, Mr. Chairman. I want to thank the committee for giving us this opportunity. Mr. Ed Ranes, the mayor of Marshall, Searcy County, was here last week. I have been meeting with these people for 12 years and they cannot understand why I cannot do anything about it.

They wanted to bring up a lot of witnesses and I said, "No, do not bring up any witnesses and do not send a lot of letters and telegrams. It just causes us a lot of work." But that did indicate how the people are back of it. He said, "The power companies, the private power

companies, are for it; the rural electric cooperatives are for it and all of the people are for it." As far as I am personally concerned, I have only had 1 letter in the 12 years against it.

Major Garrett stated our problem. These two projects are jewels in that White River setup. As I understand it they are the last two in the White River and its tributaries that are set up by the Corps of Engineers. They are not feasible under this new formula. That is conceded. But they are feasible under the same formula under which every other project in that great State has been authorized. Part of them have already been built.

Table Rock is under construction. Construction money for Greers Ferry and planning money for Beaver have been arranged and they do not have a better benefit-cost ratio—or it is marginal if it is—than either of these two projects.

I am laying myself at the mercy of the committee. I do not contend under the new formula they are feasible but I contend they should not be shut off.

Mr. DAVIS. Because over a long period of years all of the other projects have been built.

Mr. TRIMBLE. It is like shutting the doors on a couple of children and saying, "We have changed the rules. You cannot come in and you are going to have to eat outside." Mr. Moses, as you indicated in your statement, is a very conservative man.

Mr. DAVIS. Very.

Mr. TRIMBLE. And he thinks these projects are fair. So I leave my case with this great committee.

Mr. DAVIS. We are sorry we kept you so long, Judge, but this committee sat right through here.

Mr. TRIMBLE. I understand all of that, and that is fine.

Mr. BALDWIN. I have a question as to section 2. Where did the $1,600,000 come from?

Mr. TRIMBLE. Mr. Baldwin, at the time I drew this bill in January it is my recollection that the overall authorization for the White River was under par. In other words, it had to be lifted. I just put this extra $1,600,000 in there to lift the whole authorization so that the engineers could go ahead with it. I am not sure. Maybe General Itschner or Major Garrett will know whether the overall was lifted. It had to be for Table Rock, and whether it was lifted for these two projects I do not remember.

Mr. BRENNAN. Mr. Chairman, I have information on that, if you wish. You will recall I testified on the basin authorizations several weeks ago and pointed out that there was a surplus authorization on the White River Basin, as of now, of approximately $36 million. So that technically, for the inclusion of this project no additional authorization would be required at this time.

Mr. TRIMBLE. That is right. And that can just be stricken out.

Mr. DAVIS. At this time.

Mr. TRIMBLE. That is right.

Mr. DAVIS. We would not have to concern ourselves with the $1,600,000?

Mr. TRIMBLE. No, sir.

Mr. BRENNAN. No, sir.

Mr. TRIMBLE. If you can put it in the omnibus bill there is enough authorization to take care of it according to Mr. Brennan.

Mr. BALDWIN. Do you mean this would be handled like a large basin project and when we ran out of the $36 million you would come back to give us an estimate for the whole basin?

Mr. BRENNAN. That is correct. You will also recall the White River is one of the basins where I indicated there would be a deficit under existing conditions prior to the year 1960.

Mr. DAVIS. But you do not think you need more money authorized now? In other words, you do not expect to get started on this? Did you ask for an increased authorization for the White River when you testified?

Mr. BRENNAN. Yes, sir. We testified there would be a $20 million estimated deficit in the basin authorization, but whether or not that $20 million should be increased would depend on the committee's views with respect to the beginning of actual construction on Judge Trimble's projects.

Mr. DAVIS. In that case how much would the overall increase be?

Mr. BRENNAN. The eventual increase would, of course, be the entire cost of the project.

Mr. DAVIS. But you would not ask that much for the first couple of years?

Mr. BRENNAN. No, sir. We would ask for more later.

Mr. DAVIS. Do you want to modify a little bit later your increased authorization for the White in view of favorable action we may take during executive session on these projects?

Mr. BRENNAN. I would suggest during that time these basin authorization figures be all gone over by the committee and brought up to date, and matters such as this and possibly others which may involve changes in our anticipated progress be considered by the committee. You might want to consider different amounts on several of the basins.

Mr. DAVIS. We hope to get started on the 14th of this month. We will certainly have to go right to work in an executive session and have your help there and General Itschner if he can spare the time.

I want to thank the gentlemen of the committee and the representatives of the Corps of Engineers for staying here overtime.

We will adjourn until 10 a. m. tomorrow.

(Whereupon, at 1:05 p. m. the subcommittee adjourned until 10 a. m. the following day, Friday, June 8, 1956.)

FLOOD CONTROL OMNIBUS BILL

FRIDAY, JUNE 8, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL OF THE
COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10 a. m., in room 1302, New House Office Building, Hon. Clifford Davis, chairman of the subcommittee, presiding.

Mr. DAVIS. It is 10 o'clock and the committee will be in session.

SANDY LICK CREEK AT BROOKVILLE, PA. (H. R. 7138)

We take up first this morning H. R. 7138, introduced by our colleague, Mr. Gavin, of Pennsylvania. We will hear first from Colonel Penney, representing the Corps of Engineers. That is our usual procedure.

Colonel Penney, will you come around?

STATEMENT OF COL. HOWARD W. PENNEY, CORPS OF ENGINEERS—Resumed

Colonel PENNEY. Mr. Chairman, H. R. 7138 would authorize the construction of a local flood-protection project at Brookville, Pa., in accordance with a report of the district engineer, ordered April 18, 1951. The authority for the survey in regard to this project was authorized by resolution of the House Public Works Committee dated July 21, 1955. The study is currently being made and is scheduled for completion by the district engineer in December of this year.

With your permission, I will briefly give the salient facts from the study as developed to date.

Brookville is located on Red Bank Creek, in western Pennsylvania, about 48 miles above the mouth of Red Bank Creek, which is a tributary of the Allegheny River. At Brookville, North Fork Creek, going this way, and Sandy Lick Creek join to form Red Bank Creek.

There is no existing Federal flood-control propect at Brookville. A serious flood problem exists at Brookville, caused by the inadequacy of these stream channels to carry the flood flows that originate in the drainage basins of North Fork Creek and Sandy Lick Creek. We feel severe flood damage occurs to well developed industrial, commercial, and residential areas along both banks of all three creeks.

Brookville has a population of about 4,300 people. It is the second largest community in Jefferson County and is the county seat. It

has diversified industries, the major ones of which are the manufacture of electronic equipment and manufacture of locomotives.

Brookville also has a long history of floods, with that of 1861 believed to be the largest ever known there. The flood of 1936 is the largest of recent record, and if it recurred today would cause damages totaling about $900,000. Since 1936 there have been 8 serious floods at Brookville, including 2 this year, that is, 1956, 1 in February and 1 in May. The February flood caused damages of about $160,000. A much more serious flooding was averted by the efforts of local people in which they successfully sandbagged an existing dike.

The average annual direct flood damages are estimated at approximately $75,000.

The proposed solution is improvement of the stream channels to provide the maximum practicable degree of protection against a recurrence of a flood of the magnitude of 1936. The improvement would consist of improving the channel of the North Fork Creek for about 2,000 feet, of the Sandy Lick Creek for about 7,000 feet, and on Red Bank Creek for about 7,000 feet, with a pilot channel at the downstream end of the improved channel, as well as a channel stabilization structure on North Fork Creek.

The tentative estimated Federal cost based on April 1956 prices is approximately $900,000. The tentative estimated cost to local interests is about $280,000 for lands, easements, rights-of-way, and utility alterations, and about $6,700 annually for maintenance of the work.

Local interests would also be required to hold the Government free from damages.

The tentative benefit-cost ratio is 1.35 to 1. State or agency comments have not yet been obtained. Because these studies are not yet complete these data I have given are tentative. Indications are, however, that no major departure from the proposed solution will be found necessary. Additional study is needed to define the features of the plan and get a firm cost estimate, and the cost may increase. Further studies also are required better to determine the costs to local interests. Benefits are also expected to increase based on data being assembled, so that studies to date indicate the project will be found economically justified, although the degree of that justification has not yet been established.

The town of Brookville has given preliminary assurances to the district engineer that they would meet the requirements of local cooperation.

That is all I have to present, Mr. Chairman, and I will be glad to try to answer any questions.

Mr. DAVIS. Thank you, Colonel.

We will hear from Mr. Gavin.

STATEMENT OF HON. LEON H. GAVIN, MEMBER OF CONGRESS FROM THE STATE OF PENNSYLVANIA

Mr. GAVIN. I want to thank you, Mr. Chairman, and the members of your great committee, for giving me the opportunity to present the flood-control project at Brookville, Pa.

Mr. Chairman, without objection at this point I would like to insert the prepared statement which I have.

Mr. DAVIS. Without objection, it may be made a part of the record.
(The prepared statement of Mr. Gavin is as follows:)

The first public hearing by the engineers was held in Brookville on April 12, 1945. The hearing was for the entire area. The Brookville flood-control-project resolution was offered to the committee July 27, 1950. The House Public Works Committee adopted a resolution on April 18, 1951, requesting the Board of Engineers for Rivers and Harbors to review reports with a view to determining whether improvements for flood control on North Fork Creek, Red Bank Creek, and Sandy Lick Creek at and in the vicinity of Brookville were advisable, and called for submission of a report for preliminary examination.

In 1952 I was advised by United States engineers that initiation of this study had been held in abeyance because of a lack of funds; the appropriation bill for fiscal year 1952 did not include any funds for the Corps of Engineers investigation program. In February 1954, I requested the Public Works Committee to include the Brookville project in the authorization bill—the first one in 4 years. A report from the Engineers in 1954 stated funds were still not available for the preliminary study at Brookville. In March 1954 Hon. George A. Dondero, chairman of the Public Works Committee, requested the Chief of Engineers to advise the committee whether or not they could submit an informal report on the estimated cost of the project even though a survey study had not been made so as to include Brookville in the omnibus authorization bill. General Sturgis replied that such an informal report would have to be limited to comments on the preliminary plans established by the Commonwealth of Pennsylvania, and comments would have to be made without the benefit of the detailed study. The engineers advised that the report would cost an estmiated $7,500, but funds were still not available.

In July 1954, I offered an amendment on the floor to have Brookville authorized as a part of the Reynoldsville project. The amendment was defeated. On July 20, 1954, the United States engineers advised me that $7,500 had been allocated for a preliminary survey on Sandy Lick Creek. On January 17, 1955, the United States engineers advised me there was no money for the Brookville project. The project is to be sent back to the Public Works Committee after preliminary examination has been completed, and which is underway with money already allocated.

On March 30, 1955, the district engineer, Pittsburgh, advised me that completion of the preliminary examination was expected by May 15, 1955. The preliminary examination scope was sent to the division engineer on May 20, 1955. On July 1, 1955, the preliminary examination was favorable and was received by the Chief of Engineers on June 30, 1955. It was sent to the Board of Engineers for Rivers and Harbors for review and action. From there it was to be sent to the Public Works Committee.

On June 20, 1955, I introduced H. R. 7138 for the purpose of authorizing the Brookville project, and it is now before your committee. On July 28, 1955, General Sturgis advised me that they could not proceed on just a preliminary survey and suggested that the committee pass a resolution authorizing that the Corps of Engineers make a complete survey. On July 29, 1955, the Public Works Committee adopted a resolution authorizing the Board of Engineers for Rivers and Harbors to proceed with the preparation of a survey report on the project.

In November 1955, I was advised by the Engineers that a survey report at Brookville would be initiated by November 30, 1955, with available funds in the amount of $20,000. The total cost of study was $47,100; therefore, additional funds would be required from future appropriations to complete the project report. In January 30, 1956, I was advised that sufficient funds would be made available for completion of the study by December 1956. An appropriation of $28,500 is in the present public-works appropriation bill which will complete the project report, which should be completed by the end of this year.

So I might say to the committee that this community has been hit by these devastating recurring floods over a long period of years, jeopardizing the economic and industrial life of the community, and this year they were threatened with floods on three different occasions. I have presented to you a number of the pictures of the recent threat to the community.

Mr. GAVIN. The town of Brookville has one industry in particular upon which the town is quite dependent, and this plant is threatened every time there is high water. The cost of removing machinery and equipment each time runs into a considerable sum of money; after the threat is removed, returning the equipment and replacing it has cost this company many thousands of dollars. So there is a hesitancy about expanding at this location because of the fact that these flood threats occur periodically and, as I said, there have been three threats this year.

I feel this is one project that can be found to be economically justified. It would make a great contribution to the entire Brookville area. I feel that these small projects should be given every consideration by your committee. I realize there are hundreds of them all over the Nation. I think it is a very wise investment of the American taxpayers' dollars that relief should be afforded to these small communities which are hit by these floods periodically.

There seems to be greater concern about the big projects costing a half a billion dollars or a billion dollars for the construction of colossal, gigantic dams. When we get into the small flood-control projects which require the relocation of highways and bridges, streets and sewers, and which are a real menace, a threat to the economic life of these communities, I think we should give greater consideration to affording relief to the people of the smaller communities who have suffered for many years.

There are many hundreds of small projects, and I feel we should give more and more attention to the smaller communities that are hit by these devastating floods. I sincerely hope the committee will take favorable action on this Brookville project, so it can be included in an authorization bill; then, when the project report is completed, we will be in a position to proceed, with the construction work and afford these people, who have suffered for many years, the relief which is so essential to the well being of the Brookville area.

I will be glad to answer any questions you may have to ask of me relative to this project. This is a typical small flood-control project.

Mr. DAVIS. Well, Colonel Penney made his usual good, factual statement. He very generously stated up to this point the cost was justifiable. He further stated that he thought the benefits would increase as later studies develop. No one can say that you have not been active and very diligent in connection with this matter. You have certainly pursued it. You made a very fine statement and especially so in your concluding remarks.

In all sincerity, the Chair does hope that when this bill reaches the floor you will assist us, as we seek to assist other Members, as they in turn seek to look after their constituencies and their problems. We hope you will help us and speak up on the floor because our only interest is to try to do the best we can from the standpoint of authorizing these projects to the end that many of these communities which have been long suffering will get relief at the earliest possible time.

We do thank you.

Mr. GAVIN. Off the record.

(Discussion off the record.)

Mr. GAVIN. Mr. Chairman, I want to compliment the committee on their patience for the hours and days spent on these hearings. You

have earned and deserve the hearty commendations of the Members of the House. All of the previous chairmen and members over the years have worked hard and diligently, you, too, Mr. Chairman, have made a great contribution to the conservation of our waters for useful purposes rather than devastating floods and the development of our flood-control programs, in this Nation, so that you my very good and able freind are deserving of our hearty commendation for the excellence of the performance you and the committee have turned in.

In these few minutes I have here, I want to pay my respects also to the United States Army engineers. They are a great institution of over 150 years' duration. They have a record of which they can well be proud—a record of a fine performance both in times of peace and times of war. I think the United States Corps of Engineers are entitled to the hearty commendation of the Congress and the Nation for the magnificent performance they consistently turn in over the years.

My very good and able friend, Gen. Sam D. Sturgis, Chief of Engineers, has turned in an outstanding performance. He is a great engineer and soldier; he, too, deserves our hearty commendation for his great record and accomplishment as Chief of Engineers. I want you to know Mr. Chairman and committee that I am most grateful for the patience you have shown toward me, because I diligently, as you well know, have pursued this little Brookville project for the past several years. I trust that favorable action will be taken so the active construction work can be undertaken and relief afforded the people of the Brookville area from these devastating floods.

Mr. DAVIS. Thank you very much.

GARRISON DAM, N. DAK. (H. R. 10990)

We pass next to H. R. 10990, Mr. Burdick, of North Dakota, who very graciously kept his people over until today because we ran long overtime on yesterday. The Chair wants to express the appreciation of the committee to Mr. Burdick for his courtesy and thoughtfulness of yesterday. It was very helpful of you. Thank you, Mr. Burdick.

STATEMENT OF HON. USHER L. BURDICK, MEMBER OF CONGRESS FROM THE STATE OF NORTH DAKOTA

Mr. BURDICK. I think the chairman, if not the new members, is familiar with the Garrison Dam at or near Williston, N. Dak. For several years I tried to avoid this hearing because the question arose many years ago as to whether the original authority for the dam to create a water pool of 1,830 feet should be increased to 1,850 feet. Williston is west of the dam. I suppose by river miles it must be 190 miles west.

The increase in this water pool from 1,830 feet to 1,850 feet brings the water in the pool up to the city of Williston and beyond it, and farther west, until the Yellowstone River meets the Missouri about 18 miles farther west, I would say. In the meantime, if that is to be the program, and the Army engineers insist upon it, that leaves a pool of water at Williston, a lake there——

Mr. DAVIS. Has construction gone far enough to bring about that inundation now?

Mr. BURDICK. No.

Mr. DAVIS. That is in the future?

Mr. BURDICK. Yes. When the original act was passed it provided that the water pool should in no way interfere with the beneficial uses of the water in that area. Now if they could not interfere with the beneficial uses of water, and the city water system and the irrigation program out there, then the Army engineers took it upon themselves to avoid that law by building dikes. That is what they are concerned with now. That is the building of dikes.

If they build dikes around those irrigation projects in the city of Williston, Williston will be camped alongside of a lake.

The question immediately before you is the question of the city water system. The people of Williston do not want to take their water out of this pool because that will be still water for a long time to come. It will take a long time to fill it. I supposed that the Army engineers wanted my land right away. They were going to flood it. So I surrendered my land but they immediately turned around and rented it for 3 years. They would not rent it to me because I was a Congressman, so they rented it to someone else. I think they are right in that because there is a provision of law that a Congressman is limited in what he can do.

Now the fight between the city of Williston and the Army engineers right now is where you are going to take that water for the city of Williston from? The Army engineers insist it should be taken out of this lake. The Health Department of the State of North Dakota says, "No, you cannot do that." However, I am informed, and we will show you this morning that the Army engineers say regardless of what the Health Department of North Dakota says, they are going to take the water for the use of Williston out of this lake, instead of going up to the headwaters and taking it out of the Missouri River.

As I said in the beginning, I tried to avoid all of this trouble years ago by limiting the dam to 1,830 feet. If you had done that you would not have had all of this trouble.

Now the first witness we want to call this morning is Harry Polk, editor of the Daily Herald at Williston, the only daily paper in the extreme western part of North Dakota. Mr. Polk has also been president of the reclamation association, so he is very familiar with all phases of that subject.

Before I do that, though, I would like to have permission to insert my prepared statement in the record at this point, Mr. Chairman.

Mr. DAVIS. Without objection, that will be ordered.

(The prepared statement of Mr. Burdick is as follows:)

STATEMENT OF HON. USHER L. BURDICK

The pool of water behind the Garrison Dam at a water elevation of 1,850 feet above sea level (as the engineers demand) will create a lake extending up to Williston and beyond to a point where the Yellowstone joins the Missouri.

This lake will be practically a still body of water, and this will necessitate the changing of the water system of the city of Williston. For health reasons the water will have to be taken from the river from above the lake and that will entail considerable expense. The engineers insist on having the water taken from the lake and the people of Williston object. The North Dakota Health Department objects, but the Army engineers insist that they will go ahead regardless of what the people of Williston and the Health Department of North Dakota have to say.

It would be much better for a flat appropriation to be made allowing the city of Williston to construct the new water system in its own way and in conformity to the laws of North Dakota, than to keep up several years fighting with the Army engineers, which in the long run will cost more than what the city is now willing to settle for. The bill that I have introduced, H. R. 10990, will do the job. Since this water pool will rob the city of 90,000 acres of the best land in the State, the city should not be further ruined by a water system insisted upon by the Army engineers.

Mr. DAVIS. Mr. Burdick, how many witnesses all told will you have this morning?

Mr. BURDICK. We have five.

Mr. DAVIS. Do all of them want to get away by 11 o'clock? It is our usual procedure to hear from the Army engineers first, but we have made an exception in your case rather accidentally to let you start talking.

Mr. BURDICK. I have always found in my fight against the high dam that the Army engineers camp here in Washington all the time, and they can be heard after we get through.

Mr. DAVIS. We will hear then from Mr. Polk, who is a good friend of our good friend, Ben Jensen. We will listen to the Army engineers last this time, Mr. Burdick.

STATEMENT OF HARRY E. POLK, PUBLISHER, WILLISTON DAILY HERALD, WILLISTON, N. DAK.

Mr. POLK. I will be delighted to defer to Major Garrett.

Mr. DAVIS. No, you go right along, Mr. Polk. We are glad to have you here and are glad you are a good friend of our good friend, Ben Jensen.

Mr. POLK. Thank you, Mr. Chairman.

Mr. Chairman, my name is Harry E. Polk, and I appear before the committee in support of H. R. 10990, which is a bill to authorize the Corps of Engineers to compensate the city of Williston, N. Dak., for replacement of a municipal water supply and water treatment facilities which will be damaged and rendered inoperative by the operation of Garrison Dam and Reservoir on the Missouri River.

Before commenting on the facts and merits of this legislation, I should like to express my appreciation to the chairman and the committee for the privilege of being able to appear in support of this measure.

Mr. Chairman, because of your patience and the press of time I am going just to hit the high spots of my statement, with the understanding, I presume, that it will be made a part of the record, that is, the entire statement.

Mr. DAVIS. Yes. Without objection, it will be made a part of the record at this point.

(The prepared statement of Mr. Polk is as follows:)

STATEMENT OF HARRY E. POLK

Mr. Chairman, my name is Harry E. Polk, and I appear before the committee in support of H. R. 10990, which is a bill to authorize the Corps of Engineers to compensate the city of Williston, N. Dak., for replacement of a municipal water supply and water treatment facilities which will be damaged and rendered inoperative by the operation of Garrison Dam and Reservoir on the Missouri River.

Before commenting on the facts and merits of this legislation, I should like

to impress my appreciation to the chairman and the committee for the privilege of being able to appear in support of this measure.

For the information of the committee, I am a resident of Williston, N. Dak., where I have been publisher of the Williston Daily Herald more than 30 years. My capacity in appearing before this committee is as a representative of the city Commission of Williston. I am somewhat familiar with the program of the Corps of Army Engineers and their projects, both as president of the National Reclamation Association for 4 years, and more recently as a member of the Water Resources Task Force of the Second Hoover Commission.

So much for my background. I shall now proceed to the subject matter of this legislation, being as brief as I can, realizing the load of work that now rests upon Congress in these late days of its second session.

This legislation comes about by reason of the construction of the Garrison Dam and Reservoir on the Missouri River. As a result of this project the water level at the city of Williston is fixed in such an elevation as to require the building of levees to protect the city's water facilities and two existing irrigation projects.

As the committee well knows, the construction of levees, while in many cases adequate, always poses a problem of future damage if the levees go out, which has happened at times along the course of the rivers of this Nation. There is also added danger in our area from seepage due to permeable qualities of the soil.

The Corps of Army Engineers and the City Commission of Williston have repeatedly tried to reach some agreement in relation to the proper handling of the water facilities of the city.

Williston takes the position that it is not presently in opposition to the Garrison Dam project, although we had opposed the operating pool level of the reservior at 1,850 feet. One of the major factors in that opposition was the damaging effect to our city's water and sewerage systems. Now we hold that the United States Government in the prosecution of this project should see to it that the city of Williston is adequately compensated for any damages arising by reason of the acquisition and building of this reservoir.

For protection of the water and sewerage works of our city, the Army engineers have decided that levees and dikes would be adequate and proper. This is not the view of the residents and city commission, nor of our city engineer. We take the position that the water plant should be entirely removed from its present location and established 6 miles upstream, above the operating level of the reservoir, so there will be no possible danger of its being inundated by reason of any break in levees, or seepage therefrom. The Corps of Engineers has estimated $686,000 as the cost for constructing replacement facilities—those for which they feel the Federal Government would be responsible. This figure is also concurred in by Williston's consulting engineer, who will make a statement here. However, it falls far short of what we consider compensatory damages, which we hold should include removal and rebuilding of the waterworks themselves—since our one source of supply, the Missouri River, was virtually taken from us. This legislation provides for that total replacement and loss. In addition to the $686,000 for items agreed upon by the Army engineers and the city, approximately the sum of $1,099,500 is necessary to fully take care of the total damages claimed by the city. For simplicity's sake, the figure dealt with in this bill was set at $2,200,000.

We respectfully urge consideration by this committee of the situation in which the city of Williston finds itself. We are only asking that the Federal Government, in the execution of the Garrison project, treat the city fairly and equitably if it is going to endanger the health and welfare of the city.

We believe the city of Williston is entitled to have its water system removed from a dangerous area and not be subjected to the unstable condition of being solely dependent on protection by levees or dikes. Again I hark back to the past where flood conditions in levee systems have failed to fully serve the purposes for which they were built.

I also direct the committee's attention to the fact that the State Health Department of North Dakota is unalterably opposed to the recommendations of the Corps of Army Engineers. The State director, J. H. Svore, discusses the matter in a letter addressed to Hon. Milton R. Young, United States Senator from the State of North Dakota, dated April 16, 1956, which I now offer to be inserted as a part of this hearing. In essence that letter indicates that the sole consideration given by the Corps of Army Engineers in the building of this proposed project was based on economic conditions only and without regard to the health and welfare of the city of Williston.

Now, as a matter of law, I should like to refer the committee to provisions of Public Law 534, 78th Congress, dealing with the authorization of construction of certain public works on rivers and harbors for flood control and other purposes. It is under this act that the Garrison Dam has been authorized. Subparagraph (b) of section 1 of that act reads as follows:

"(b) To use for navigation in connection with the operation and maintenance of such works herein authorized for construction, of waters arising in States lying wholly or partly west of the 98th meridian shall be only such use as does not conflict with any beneficial consumptive use, present or future, in States lying wholly or partly west of the 98th meridian, of such waters for domestic, municipal, stock water, irrigation, mining or industrial purposes."

North Dakota does lie west of the 98th meridian and the provision definitely states that such use shall not conflict with the use of such waters for domestic, municipal, or industrial purposes. It is contended that operation of the Garrison Reservoir will definitely "conflict * * * with beneficial consumptive use * * * for domestic and municipal purposes" contrary to this law, and therefore it is incumbent on the Corps of Army Engineers and the Federal Government to hold the city of Williston completely free from any existing loss and possible future loss relative to the use of water for "domestic, municipal, or industrial purposes."

I do not desire to take further time of the committee because of other witnesses who will deal more specifically with the relief sought by this bill. I only desire to add that this legislation is not without precedent. The Congress has recognized its inequity in similar situations which have come to its attention, and by legislation has determined and authorized the payment of consequential damages to injured municipalities and public entities. I refer specifically to H. R. 9859 which became Public Law 780, 83d Congress, 2d session. In its Report No. 2007, commenting upon the facilities at Pollock, S. Dak., the Senate Committee on Public Works made the following statement, and I quote:

"The Oahe Reservoir was authorized by the Flood Control Act of 1944 and is now under construction. The town of Pollock, with a population of about 400, is on the Missouri River within the Oahe Reservoir area, and will have to be relocated in connection with the construction of the reservoir. The water supply is obtained from individual wells, and tile drains and septic tanks are used for sewage disposal facilities.

"In the acquisition of the townsite, the property owners will be compensated for the appraised valuation of their individual water and sewerage facilities. The wells at the present time are only required to be about 25 feet deep. In the new location of the town it will be necessary for the wells to be approximately 200 feet deep. *The committee feels that the property owners should be compensated for the additional cost of providing similar facilities at the new location of the town.* [Emphasis supplied.] Payment for these facilities will be made from regular appropriations for construction of the Oahe Reservoir."

The House concurred in the view taken by the Senate Public Works Committee, and Congress modified the plans for the development of the Missouri River Basin to include the payment by the Corps of Engineers for construction or provision of adequate water supply and sewerage facilities in the new relocated municipality of Pollock, S. Dak. It is my opinion that the case at Pollock is on common ground with that of the city of Williston, N. Dak.

Without taking any further time of the committee, it is my sincere hope that this committee will in its consideration of the plight facing the city of Williston by reason of the construction of the Garrison Dam, act favorably upon H. R. 10990 so that the city may be adequately protected in its right as a city free from the danger of floods which would endanger the health and welfare of the citizens who reside therein.

I again thank you for the privilege of allowing me to appear before you.

Mr. DAVIS. I am surprised this bill was just introduced on May 14 of this year and we have no reports from the Army engineers, or any other Government agencies, on it; but proceed, sir.

Mr. POLK. I believe, Mr. Chairman, probably the major will be in a position to comment on the report, which I understand is in transit at the present time and being cleared by the other departments.

Mr. DAVIS. All right, sir.

Mr. POLK. We have not been able to see a copy of it, but it is my understanding that the report has been made.

For the information of the committee, I am a resident of Williston, N. Dak., where I have been publisher of the Williston Daily Herald more than 30 years. My capacity in appearing before this committee is as a representative of the City Commission of Williston. I am somewhat familiar with the program of the Corps of Army Engineers and their projects, both as president of the National Reclamation Association for 4 years, and more recently as a member of the Water Resources Task Force of the Second Hoover Commission.

So much for my background. I shall now proceed to the subject matter of this legislation, being as brief as I can, realizing the load of work that now rests upon Congress in these late days of its second session.

This legislation comes about by reason of the construction of the Garrison dam and reservoir on the Missouri River. As a result of this project the water level at the city of Williston is fixed in such an elevation as to require the building of levees to protect the city's water facilities and two existing irrigation projects.

As the committee well knows, the construction of levees, while in many cases adequate, always poses a problem of future damage if the levees go out, which has happened at times along the course of the rivers of this Nation. There is also added danger in our area from seepage due to permeable qualities of the soil.

The Corps of Army Engineers and the City Commission of Williston have repeatedly tried to reach some agreement in relation to the proper handling of the water facilities of the city.

Williston takes the position that it is not presently in opposition to the Garrison Dam project, although we had opposed the operating pool level of the reservoir at 1,850 feet. One of the major factors in that opposition was the damaging effect to our city's water and sewerage systems. Now we hold that the United States Government in the prosecution of this project should see to it that the city of Williston is adequately compensated for any damages arising by reason of the acquisition and building of this reservoir.

For protection of the water and sewerage works of our city, the Army engineers have decided that levees and dikes would be adequate and proper. This is not the view of the residents and city commission, nor of our city engineer. We take the position that the water plant should be entirely removed from its present location and established 6 miles upstream, above the operating level of the reservoir, so there will be no possible danger of its being inundated by reason of any break in levees, or seepage therefrom. The Corps of Engineers has estimated $686,000 as the cost for constructing replacement facilities—those for which they feel the Federal Government would be responsible. This figure is also concurred in by Williston's consulting engineer, who will make a statement here. However, it falls far short of what we consider compensatory damages, which we hold should include removal and rebuilding of the waterworks themselves—since our one source of supply, the Missouri River, was virtually taken from us through the construction of Garrison Dam.

This legislation provides for that total replacement and loss. In addition to the $686,000 for items agreed upon by the Army engineers and the city, approximately the sum of $1,099,500 is necessary to fully

take care of the total damages claimed by the city. For simplicity's sake, the figure dealt with in this bill was set at $2,200,000.

We respectfully urge consideration by this committee of the situation in which the city of Williston finds itself. We are only asking that the Federal Government, in the execution of the Garrison project, treat the city fairly and equitably of it is going to endanger the health and welfare of the city.

We believe the city of Williston is entitled to have its water system removed from a dangerous area and not be subjected to the unstable condition of being solely dependent on protection by levees or dikes. Again I hark back to the past where flood conditions in levee systems have failed to fully serve the purposes for which they were built.

I also direct the committee's attention to the fact that the State Health Department of North Dakota is unalterably opposed to the recommendations of the Corps of Army Engineers. The State Director, J. H. Svore, discusses the matter in a letter addressed to Hon. Milton R. Young, United States Senator from the State of North Dakota, dated April 16, 1956, which I now offer to be inserted as a part of this hearing.

Mr. DAVIS. Without objection, it will be so ordered.

(The document referred to is as follows:)

NORTH DAKOTA STATE DEPARTMENT OF HEALTH,
Bismarck, N. Dak., April 16, 1956.

Hon. MILTON R. YOUNG,
United States Senate, Washington, D. C.

DEAR SENATOR YOUNG: I would like to make a few comments on the report submitted by the consulting engineering firm of Horner & Shifrin, consulting engineers, St. Louis, Mo., on the Williston water treatment plant. This report, as you know, was requested by the Washington office of the Corps of Engineers and Mr. Vance Lischer made the investigation for the firm. I was pleased to hear that you were more than willing to introduce legislation to compensate Williston for some of their losses as a result of the construction of the Garrison Dam. I think your stand is entirely justified regardless of some of the comments made by Mr. Lischer in his report.

We were rather surprised when we heard an investigation of the water plant situation had been made at Williston by a consulting engineer at the request of the corps without any contact being made with the State department of health. One of the most important aspects of this whole matter on which a decision will be made regarding construction of a water plant has to do with Public Health and the approval of the plans and specs. by the State health department. This investigation was made apparently during the period of about one day and the conclusions arrived at *in no way took into consideration the regulations or laws of the State of North Dakota.* I should mention here that our working relationship with the Garrison district and the Omaha office of the Corps of Engineers has always been very cordial and on a very cooperative basis. Our attitude therefore in regard to this report refers entirely to the Chief of Engineers Office in Washington.

I believe if this report is submitted as testimony at the hearings on an appropriation for the city of Williston that there are certain parts that should not go unchallenged. I refer, as an example, to paragraph 6 on page 15:

"Consideration of flood hazard to Williston water plant from public health standpoint. It is the Consultants' judgment that there is relatively little danger to the plant due to internal flooding or failure of the levee system. This judgment is based on the assumption that the Corps of Engineers is well qualified to design levee protective systems and internal drainage facilities. This judgment is further predicated on the assumption that there is and will be a continuing Federal responsibility to provide the necessary protection in this instance. * * *."

The above assumes that the corps can make no mistakes and that under no conditions can a levee designed by the Corps of Engineers ever be topped or fail for any other reason. Unfortunately the corps has no such record and

this is not meant in any way to question their ability or competency in the field of engineering. They must, of course, balance off the cost of their construction projects against the economic benefits involved.

For the sake of discussion, let us make a few assumptions. Let us assume that the reservoir of the Garrison Dam backs water to within a few dozen miles of Williston, and it is at this level that ice forms on the reservoir for a particular winter. In the spring this ice will remain in the reservoir until it thaws out as there is no place for it to move. However, the ice forming on the Yellowstone during this same winter certainly will have a place to move and will continue to move out until it jams against the stationary ice in the reservoir. Can the corps guarantee that never in the future will this situation happen, or if it does happen there is no possibility that the jam would cause the Missouri and Yellowstone to rise above the anticipated free flow flood conditions? You probably are well aware of what happened on the Heart River this year when the ice in the Heart went out and jammed against the stationary ice in the Missouri. This is the type of thing we are concerned with, and I am sure the city of Williston is concerned with, but nothing on this item is mentioned in the report.

On page 16 the consultant states: "It follows, therefore, that a decision in this case as to whether the plant should be (1) expanded at its present site, (2) continued in operation in conjunction with a new plant at an upland site, or (3) abandoned in favor of an entirely new site developed to the full capacity requirement, must rest on the comparative economics of these possibilities. * * *"

In other words, as far as the consultant is concerned, the decision rests on economics with no consideration whatsoever for public health. It might be mentioned at this point that at one time prior to any approval of construction on the Garrison Dam itself we did seriously consider expanding the water plant at its present location and, in fact, gave our approval to the city. Basically we did not object to the site as such, but placing a water plant behind a levee or dike is contrary to our regulations and we feel entirely justified in our stand that we would not approve expansion to the present plant at this time.

I think it is unfortunate that the consultant did not spend some time in this office to determine what we consider is usable ground waters in the State of North Dakota. We are fully aware that no self-respecting eastern community would take a water of 1,490 parts per million total solids with a high sulfate content and consider it for municipal use. However, in this part of the country it is not at all uncommon and many North Dakota cities use a more undesirable water than what is available from the Williston wells. I was, therefore, rather surprised to see the consultant state: "There are no economically feasible methods for making the well water suitable for a public supply."

I do not wish to bore you with additional details in regard to this report, but I certainly hope that you might be able to use some of the material included in this letter in the event the Washington office of the corps should happen to testify against a very justifiable bill to provide assistance for the city of Williston.

Sincerely,

JEROME H. SVORE,
Director of Public Health.

Mr. POLK. Thank you.

In essence, that letter indicates that the sole consideration given by the Army Corps of Engineers in the building of this proposed project was based on economic conditions only and without regard to the health and welfare of the city of Williston.

Now, as a matter of law, I should like to refer the committee to provisions of Public Law 534, 78th Congress, dealing with the authorization of construction of certain public works on rivers and harbors for flood control and other purposes. It is under this act that the Garrison Dam has been authorized. Subparagraph (b) of section 1 of that act reads as follows:

(b) The use for navigation in connection with the operation and maintenance of such works herein authorized for construction, of waters arising in States lying wholly or partly west of the 98th meridian, shall be only such use as does not conflict with any beneficial consumptive use, present or future, in States lying wholly or partly west of the 98th meridian, of such waters for domestic, municipal, stock water, irrigation, mining, or industrial purposes.

North Dakota does lie west of the 98th meridian, and the provision definitely states that such use shall not conflict with the use of such waters for domestic, municipal, or industrial purposes. It is contended that operation of the Garrison Reservoir will definitely "conflict * * * with beneficial consumptive use * * * for domestic and municipal purposes" contrary to this law and, therefore, it is incumbent on the Corps of Engineers and the Federal Government to hold the city of Williston completely free from any existing loss and possible future loss relative to the use of water for domestic, municipal, or industrial purposes.

I do not desire to take further time of the committee because of other witnesses who will deal more specifically with the relief sought by this bill. I only desire to add that this legislation is not without precedent. The Congress has recognized its inequity in similar situations which have come to its attention, and by legislation has determined and authorized the payment of consequential damages to injured municipalities and public entities. I refer specifically to H. R. 9859, which became Public Law 780, 83d Congress, second session.

The committee undoubtedly will recall this has to do with the facilities in Pollock, S. Dak. In the report that was made by the Senate Committee on Public Works, Report No. 2007, I will just quote one paragraph from that report:

> The Oahe Reservoir was authorized by the Flood Control Act of 1944 and is now under construction. The town of Pollock, with a population of about 400, is on the Missouri River within the Oahe Reservoir area, and will have to be relocated in connection with the construction of the reservoir. The water supply is obtained from individual wells, and tile drains and septic tanks are used for sewage-disposal facilities.
>
> In the acquisition of the townsite, the property owners will be compensated for the appraised valuation of their individual water and sewage facilities. The wells at the present time are only required to be about 25 feet deep. In the new location of the town it will be necessary for the wells to be approximately 200 feet deep. The committee feels that the property owners should be compensated for the additional cost of providing similar facilities at the new location of the town. Payment for these facilities will be made from regular appropriations for construction of the Oahe Reservoir.

We feel this is in common with our problem.

The House concurred in the view taken by the Senate Public Works Committee, and Congress modified the plans for the development of the Missouri River Basin to include the payment by the Corps of Engineers for construction or provision of adequate water-supply and sewage facilities in the new relocated municipality of Pollock, S. Dak. It is my opinion that the case at Pollock is on common ground with that of the city of Williston, N. Dak.

Without taking any further time of the committee, it is my sincere hope that this committee will, in its consideration of the plight facing the city of Williston by reason of the construction of the Garrison Dam, act favorably upon H. R. 10990, so that the city may be adequately protected in its right as a city free from the danger of floods which would endanger the health and welfare of the citizens who reside therein.

I again thank you for the privilege of allowing me to appear before you.

I thank you very sincerely, Mr. Chairman.

Mr. DAVIS. Your statement has been so thorough that the Chair is inclined to believe that other statements may be cumulative. This

determination must be made by the committee in executive session, but it occurs to me as of this moment possibly this bill should be considered on its own and not be included in our omnibus bill. I say that is a matter for later determination.

All right, Mr. Burdick. Are there any questions?

You get your water now in the city of Williston from underground sources?

Mr. POLK. We get it partly from wells.

Mr. DAVIS. That is what I mean—an underground supply.

Mr. POLK. That is right.

Mr. DAVIS. And your position is you do not want to take this unstable water from the reservoir and, as Mr. Burdick said, it may take some time to fill it; and then you make the further claim that possibly you could have a levee or a dike failure and you would be without a supply of water. In the main that is your position. Is that right?

Mr. POLK. Yes, sir. We want to go 6 miles above, which will take us above the 1,850-foot elevation.

Mr. DAVIS. Then will you get your water from underground or from a stream?

Mr. POLK. It will be taken directly from the Missouri River.

Mr. DAVIS. And you will purify it. But you do not want to wait until that water gets down into the reservoir and take it from there?

Mr. POLK. That is correct.

Mr. DAVIS. All right, Mr. Burdick.

Mr. BURDICK. The next witness, Mr. Chairman, is Walter Burk of the city commission of Williston.

Mr. DAVIS. We are very glad to have you, Mr. Burk.

STATEMENT OF WALTER O. BURK, MAYOR, CITY OF WILLISTON, N. DAK.

Mayor BURK. Mr. Chairman, my name is Walter O. Burk. I am the mayor of the city of Williston, where I have practiced law for the past 28 years.

My city is at the head of Garrison Reservoir. Approximately 78 million tons of silt flow past Williston every year, and much of that silt will be deposited at the head of the lake at the back door of our city. Williston gets most of its water supply from the Missouri River. Because of the Garrison Reservoir our sewage and garbage disposal system must be moved, and likewise our water works system.

With the exception of minor details, we are in agreement with the Corps of Engineers on the relocation of our sewage system and garbage disposal system. Therefore these items are not a part of the bill we are considering this morning.

Our water works system consists of four major parts:

A water intake from the Missouri River;

A water transmission line;

A presedimentation basin made necessary because of the silty nature of the raw water; and

Our water treatment and distribution plant.

Mr. DAVIS. Do you propose to treat your sewage and release it below this reservoir?

Mayor BURK. No. We are in substantial agreement with the Army engineers on that. Now our sewage goes directly into the stream.

We will have a lagoon which the Army engineers will construct, and then when that lagoon is filled up it will automatically go over into the lake, or the Army engineers will pump it over. That is agreed on and we are in agreement on that.

Mr. BECKER. What do you mean by a lagoon? A sewer bed?

Mayor BURK. Yes; it is a sort of enclosure and it decomposes.

Mr. BECKER. In the open atmosphere?

Mayor BURK. In the open atmosphere. There are several of them in operation in North Dakota and they have been quite successful. The city of Jamestown has one now.

Mr. BECKER. We used to have them in our area until we got so congested. Then of course we had to build sewage treatment plants. However, they were successful in the areas where it was not greatly populated, and I presume that is so in your area.

Mayor BURK. We have a lot of room out in that sparsely populated area.

Mr. BECKER. Thank you.

Mr. ROGERS. May I ask a question?

Mr. DAVIS. The gentleman from Florida.

Mr. ROGERS. Presently do you dump raw sewage into the river?

Mayor BURK. Yes, directly into the river.

Mr. ROGERS. Raw sewage?

Mayor BURK. Yes, and it creates no problem at all.

Mr. WRIGHT. May I ask a question?

Mayor BURK. Yes.

Mr. WRIGHT. I was not quite clear on this.

Mayor BURK. Surely.

Mr. WRIGHT. The point at which the sewage enters the stream is above rather than below the dam. Is that right?

Mayor BURK. Yes. It is way above the dam now, but when the dam is finally filled up, why, it will take out our present sewage disposal system because it will be 15 feet or so below the operating level of the lake at the high point.

Mr. WRIGHT. But it will still be above the dam and would enter the lake rather than entering the stream below the dam?

Mayor BURK. It will enter the still dam. Yes.

Mr. WRIGHT. It is the consensus of your engineers and the Army engineers that this lagoon type of treatment will be satisfactory in that no undue pollution will occur to the waters impounded behind the dam as a result of that?

Mayor BURK. That is true. We agree with them on that.

Mr. DAVIS. Mr. Burk, if you could summarize your statement, we will appreciate it, for your convenience and ours too. It is a rather long statement and you are making a good presentation. However, if you can hit the high points I think it will be very satisfactory to all of us.

Mr. SCHWENGEL. We will allow him to put his entire statement in the record.

Mr. DAVIS. Right.

Mr. BURK. I will speak off the cuff then.

Mr. DAVIS. Without objection, your complete statement will be made a part of the record now and we will include, of course, that which you are about to say.

(The prepared statement of Mayor Burk is as follows:)

STATEMENT OF HON. WALTER O. BURK

Mr. CHAIRMAN. My name is Walter O. Burk. I am the mayor of the city of Williston, where I have practiced law for the past 28 years.

My city is at the head of Garrison Reservoir. Approximately 78 million tons of silt flow past Williston every year, and much of that silt will be deposited at the head of the lake at the back door of our city. Williston gets most of its water supply from the Missouri River. Because of the Garrison Reservoir our sewage and garbage disposal system must be moved, and likewise our water works system.

With the exception of minor details, we are in agreement with the Corps of Engineers on the relocation of our sewage system and garbage disposal system. Therefore these items are not a part of the bill we are considering this morning.

Our waterworks system consists of four major parts:

A water intake from the Missouri River;

A water transmission line;

A presedimentation basin made necessary because of the silty nature of the raw water; and

Our water treatment and distribution plant.

The Army engineers recognize Federal responsibility on the first three of these items, but they insist that the question of relocating our water treatment plant can only come through special legislation.

Our situation is practically the same as that of Clarksville, Va. It was necessary to construct a new sewage system for that city because of the Kerr Dam on the Roanoke River. The United States Court of Appeals for the Fourth Circuit in the case of the town of *Clarksville* v. *U. S.* (198 F. 2d 238) in reversing the decision of the United States District Court for the Eastern District of Virginia stated:

"The general principles applicable to an eminent domain taking of municipal facilities are well established. The taking may be justly compensated by payment of the cost of a substitute, so long as a full equivalent is afforded for the property taken."

* * * "Of course, the interests of the public, upon which the payment burden rests, are at stake too, and the award must not be in excess of strict equivalence. Yet we are not here dealing with a rigid, blind measure, that grants compensation only on a pound of flesh basis, but rather with an equitable concept of justice and fairness that accords with the fifth amendment's mandate. Accordingly, the equivalence requirement which must be met with respect to the substitute facility is more that of utility than of mere dollar and cents value."

* * * "And the substitute facility must be that which the claimant is legally required to construct and maintain whether or not this type be more expensive or efficient than the facility which was condemned."

It seems to me that the Clarksville case is a good yardstick for what my city is legally entitled to.

Our present water treatment plant, together with 2 wells located in the plant, has a capacity of 3.1 million gallons daily. The State Health Department of North Dakota, the United States Health Department, our city engineer and our consulting engineer all state that our treatment plant should be moved. I have attached to this prepared statement the report of Glen J. Hopkins, Sanitary Engineering Director for the United States Health Department. He states that our water treatment plant should be moved. Mr. Hopkins made his investigation at the request of General Potter of the Omaha division of the Corps of Engineers. Apparently the Washington office of the corps was not satisfied with Mr. Hopkins' report. Accordingly, they employed a firm of consulting engineers, Horner & Shifrin of St. Louis, Mo., to make another survey. Mr. Hopkins' memorandum on this report is attached to this statement. His views remain the same.

The Corps of Engineers agree with the cost estimates that our consulting engineer made in the report he submitted to our city commission November 15, 1955. The following items are not in dispute:

3,000,000 gallon intake	$151,700
Presedimentation basin and grit chamber	180,100
Electrical transmission line to site of new facilities	12,000

Under the Clarksville decision the position of the city is that we are entitled to have our water treatment plant moved to a new location. The cost of a new

3 million gallon plant is $512,700. Horner & Shifrin, the consulting engineers employed by the corps, state in their report that, from an economic standpoint, the plant should be moved.

As to the water-transmission line, the corps has offered to allow for the cost of a 16-inch line, which amounts to $360,200.

It was necessary for the city of Clarksville, Va., to install five lift substations for its substitute sewage-disposal system, which lift stations were not needed prior to the building of the Kerr Dam. The circuit court, in holding that it was the responsibility of the United States to pay for such additional costs, stated:

"It is a well-established proposition in an eminent-domain taking that the owner is to be put in as good position as he would have occupied if his property had not been taken."

Our present water-transmission line from the treatment plant to the Missouri River is 12,000 feet in length. The new one will be 6½ miles in length. It is 28,000 feet from the present plant to the proposed new intake but, because of the danger of sand boils which will arise because of the porous nature of the soil and the seepage, we are choosing a longer route to avoid the river bottom. We feel that because of the additional cost of pumping the water from now on to eternity an additional 4½ miles we should be entitled to a 20-inch, cast-iron line, which line will cost $483,000. The total of all of these items is $1,399,500.

Since the report of our consulting engineer last November additional increases have occurred in cost of material and, undoubtedly, when the present wage contracts with steel companies are renegotiated, still further increases in the price of steel will result. Our consulting engineer advises me that the additional cost above his estimates of last November will be conservatively 10 percent.

Our present plant is located on the edge of the city. Our new one will be 6½ miles away. Our city engineer has prepared a detailed cost analysis of the increased cost by having the plant located at the greater distance, which analysis is attached to my statement. He has capitalized these increased costs on the basis of 2½ percent over a period of 25 years, which capitalized cost amounts to $165,835. The total amount to which my city believes it is entitled under the decision of the Clarksville case, including the cost which we will have to pay by having the plant at a greater distance from the city, is $1,639,285. It is my opinion as a lawyer that we could prove that amount of damages in any court.

This amount will not be the entire cost of new facilities the city of Williston will require when taking into consideration future growth of the city. It is only the amount that, in my opinion, the Federal Government is legally obligated to pay. This amount does not take into consideration the great economic loss that our city will suffer by reason of Garrison Reservoir.

For the information of the committee it should be noted that when the Department of the Interior gave its approval to the operating pool level of 1,850 feet for the Garrison Reservoir it was specifically conditioned on agreement that the Corps of Engineers would fully protect the city of Williston from any "adverse effects due to the reservoir." The text of the statement of then Acting Secretary of Interior Ralph A. Tudor to Maj. Gen. Samuel D. Sturgis, Chief of Engineers, was as follows:

"This agreement is made with the understanding that the Corps of Engineers will fully protect the Bureau's Buford-Trenton irrigation project, the State of North Dakota's Lewis and Clark irrigation project, and the city of Williston from any adverse effects due to the reservoir."

I thank you for the privilege of appearing before you this morning.

Additional Costs of Operating Water Treatment Plant at Site 6½ Miles From Williston

Operating personnel:

$1.45 per hour, $0.08 per mile.

Plant operating 24 hours per day, 2-man crew equals 6 man-shifts per day.

Travel time lost—1 hour per day per man at $2.17 (overtime).

6 man-hours per day at $2.17	$13.02
13 miles per man×6 equals 79 miles at $0.08 equals	6.24
Total, per day	19.26
$19.26×365	7,029.90

Additional costs of Operating Water Treatment Plant at Site 6½ Miles From Williston—Continued

Supervision and maintenance:	
Biweekly round trips by maintenance foreman:	
1 hour lost time at $1.92 equals	$1.92
13 miles at $0.08 equals	1.04
Biweekly round trips by engineer:	
1 hour lost time at $2.88	2.88
13 miles at $0.08 equals	1.04
Total, biweekly	6.88
$6.88×104 equals	715.52
Chemical hauling:	
Present cost, 10 cents per hundredweight.	
Cost equoted by dray company to haul 6½ miles additional, 15 cents per hundredweight:	
Lime, 3,650 hundredweight×$0.05	182.50
Ammonia, chlorine, fluoride, aluminate, polyphosphates, 3,011 hundredweight×$0.05 equals	150.55
Total, per year	333.05
Telephone:	
Additional cost quoted by Northwestern Bell Telephone Co.:	
Build line to plant site and installation, $800, per year	40.00
Additional monthly charge, $26.20×12 (no tax), per year	314.40
Additional cost of maintenance and repairing 1,500 feet of pipeline:	
Estimated, $200 per year per mile of pipe:	
15,000×$200÷5,280, per year	568.18
Total additional cost per year	9,001.05

Capitalized at 2½ percent for 25 years, lump sum, $165,835.35.

OFFICE MEMORANDUM

DHEW REGION VI, KANSAS CITY, MO. (PHS),
UNITED STATES GOVERNMENT,
April 20, 1956.

To: Chief, Division of SES, BSS, PHS.
Attention: Chief, Water Supply and Water Pollution Control Program.
From: WS and WPC Activities.
Subject: Williston, N. Dak., Municipal Water Works as Influenced by Garrison Reservoir.

My report to the Corps of Engineers, dated January 10, 1956, relative the above-captioned subject has been reviewed in light of the March 1956 report on this matter by consultants to the Corps of Engineers. My report would have been improved if the phrase "the possibility of" had been inserted in line 7, paragraph 2, page 2, preceding the words "high ground water levels".

The consultants' report allows no value for the existing well system, which is used to supply water as needed above the peak plant capacity of 1.6 MGD, on the basis that well water does not meet Public Health Service drinking water standards for chemical quality. These standards are intended to reflect desirable quality, and do not establish prohibitive limits. Many municipalities in North Dakota of necessity depend wholly upon water supplies that have greater concentrations of dissolved solids, sulfates, hardness, alkalinity, and iron than does water from the municipal wells at Williston. Dilution of well water with treated river water provides substantial reduction in the concentration of objectionable chemical constituents. The mixing of 1.6 MGD of surface water with a maximum of 1.5 MGD of well water provides dilution which results in essential compliance of the blended water with Public Health Service drinking water standards. The wells thus make possible an important increase in plant output during critical periods that would remain available to an enlarged facility at this location. The wells also have value as an emergency or standby facility.

The consultants' report is predicated upon questioned reliance and complete dependability of the proposed protective works, this qualification being stated several times in the report. While I have the greatest respect for the competence of the Corps of Engineers in the design and construction of these works, I doubt that the degree of protection against high ground or flood water levels in this instance is wholly consistent with the degree of safety currently demanded for public water supplies.

My opinion remains that Garrison Reservoir and attendant works make the existing water plant less susceptible to satisfactory enlargement than previously existed.

GLEN J. HOPKINS,
Sanitary Engineer Director.

REPORT OF EVALUATION, WILLISTON, N. DAK., MUNICIPAL WATER WORKS AS INFLUENCED BY CONSTRUCTION AND OPERATION OF GARRISON RESERVOIR

INTRODUCTION

A reconnaissance review of the Williston, N. Dak., municipal water supply as influenced by the Garrison project was made on December 20–21, 1955. The review was largely restricted to sanitary engineering features. Acknowledgment is made that engineering and other pertinent data were obtained principally from the Corps of Engineers, the North Dakota State Department of Health, and representatives of the city of Williston.

BACKGROUND INFORMATION

The Missouri River serves as the principal source of Williston's water supply. A single 12-inch line extends from the intake structure into the river channel. Two intake pumps have a rated capacity of 700 and 1,000 gallons per minute, respectively. A 12-inch line served the treatment plant about 12,000 feet away. The treatment plant is of conventional design, constructed in 1932. Twin settling basins, having a total capacity approximating 1.5 MGD, are provided with desilting drains. Water is pumped from sedimentation to mixing basins served by mechanical chemical feeders, then to a Dorr-type clarifier 26 feet by 26 feet by 10 SWD. This is followed by a second sedimentation basin and rapid sand filters discharging into 2 clear wells having a total capacity of about 0.5 MGD. High service pumps have rated capacities of 500, 700, and 900 gallons per minute, respectively.

The treatment plant has a rated capacity of 1.17 MGD based upon the conventional operating rate of 2 gallons per square foot per minute. This permits temporary operation at a rate of about 1.6 MGD. A system of wells, discharging either to treated water storage or for processing through the plant, provide additional water approximating 1.5 MGD. Maximum actual daily delivery of treated water to system storage is reported as 3.1 MGD. The floor elevation of the treatment plant approximates 1,850.

Williston had a 1950 population of 7,387. Rapid growth has occurred since development of petroleum resources in the Williston Basin was initiated. Williston serves a wide trade area in which the Williston Basin oil development is centered. On December 21, the mayor reported the present population to approximate 12,000. This growth has taxed the municipal water plant and rationing of water has been necessary on occasions. Municipal officials expect added population increase and anticipated industrial development to substantially add to present water demands in the very near future. From limited observations and contact with State and local representatives, it is concluded that Williston has reasonable prospect for growth and development at a rate somewhat higher than is expected to prevail for the State of North Dakota.

INFLUENCE OF GARRISON RESERVOIR UPON EXISTING FACILITIES

Intake and raw water transmission line

The existing intake is located at a point where extensive silt deposits are expected to develop from reservoir operation. Siltation would seriously complicate use of the existing intake, and in all probability make it inoperative. The most reasonable alternative appears to be relocation of the intake structure at a point upstream from heavy silt deposition. The logical point of relocation

seems to be the restricted channel where highway 85 crosses the Missouri River. Relocation of the intake to this point would require about 28,000 feet of transmission line to serve the existing water plant located at the edge of town.

Treatment plant

A relocated intake and a new transmission line would permit continued operation of the existing plant, if levees are provided with an extensive system of interior drainage by pumping. Levees and interior drainage will be necessary for reasons other than continued operation of the existing water plant. As the present plant is admittedly inadequate for current needs, thought has been given to its enlargement. Much of the duplicated facility would of necessity be subjected to high ground water levels, particularly at times wheen pool level of Garrison Reservoir approaches the 1,850 level. It is a general sanitary engineering practice to require that all portions of new waterworks construction, involving purified or partially purified water not subject to positive pressure, be located above anticipated ground water levels. This is intended to preclude the possibility of unpurified water entering the facility in the form of seepage through cracks, construction joints, and similar defects. A new plant providing this safeguard would require special precautionary measures that would essentially result in two separate and distinct water plants, rather than the integrated operation of the new and old portions as a single facility. The State department of health has recommended against enlargement of the existing facility, but has advised that its continued utilization will not be opposed. This action is considered consistent with normal State health department procedures and general sanitary engineering practice.

Without question the Garrison project has made the existing water plant much less susceptible to satisfactory enlargement.

The two factors, unsuitability of the present plant for satisfactory enlargement and its current inadequacy, in combination, make it advisable that a new water plant be constructed at a different location.

Opinion regarding individual segments of waterworks replacement facilities

Raw water intake.—The present intake consists of one 12-inch pipe into the river. A new facility having two inlet pipes would be highly desirable. An intake adequate for the maximum anticipated future needs of the city would cost but little more than a facility designed only for present needs. The larger facility would be consistent with sound engineering practice. As the cost of the larger facility will not be materially higher, it is recommended that the intake structure and structure-to-river piping permit an ultimate capacity of 12 to 18 million gallons through future addition of more or larger pumps.

Transmission line.—Like the intake structure, a transmission line is not susceptible to future enlargement without virtual duplication of the original expenditure. Substantial increase in capacity can be obtained with only moderate increases in original construction costs. Good engineering practice thus dictates that a transmission line be made adequate to meet any increased demand that may be reasonably anticipated. We are of the opinion that the line as constructed should permit transmission at a rate of (a) 6 million gallons per day with reasonable pumping costs, (b) 9 million gallons per day without excessive costs, and (c) up to 12 million gallons per day for short periods of time without exorbitant costs. The following tabulation lists friction losses for 28,000 feet of transmission line of various sizes under several pumping rates.

Friction loss in 28,000 feet of pipe

[C=140]

Pipe size, inches	Pumping rate in million gallons per day			
	4	6	10	12
16	102	216	555	780
18	57	121	311	437
20	34	73	185	263
24	14	30	77	107

NOTE.—A 20-inch line is recommended as providing a proper balance of reasonable first cost, economical pumping, and future increase in water demand.

Water purification plant

(*a*) *Type.*—Until recent years water plants handling Missouri River water were required to provide presedimentation, chemical mixing, long-term coagulation and flocculation, sedimentation, filtration, chlorination, and finished water storage. Williston's plant is of this type, and in addition, provides for fluoridation, softening, and stabilization.

In recent years treatment has been somewhat modified to permit less costly facilities. The sludge blanket type of plant, which concentrates coagulation, flocculation and clarification in a single unit, has become accepted. While considerable less in original cost, this process requires close chemical balance and more expert operation. As the process may be thrown out of balance with changes in raw water quality, these plants were long considered applicable only for the treatment of ground water, where chemical character, temperature, and turbidity are quite uniform. Adaptation of this process to surface waters of variable characteristics has been successful where competent operation and close supervision is provided.

The sludge-blanket-upflow process should be accepted at Williston if need is recognized for continuously providing competent supervision and operation.

(*b*) *Capacity.*—The present water system, when producing 3.1 million gallons per day, was inadequate to meet peak demands during the summer of 1955. Rationing of water was necessary. It is thus obvious that current needs can be met only through a capacity of approximately 4 million gallons per day. Provision for reasonable expansion would require about 5 million gallons per day of capacity. In view of the Williston Basin development and resultant expectant growth of the city, a 6 million gallon per day plant would not be unreasonable at this time.

Needs above this level would develop in the unpredictable future. In our opinion, they could best be met by additions to an original plant of 5 or 6 million gallons per day capacity. Any waterworks facility constructed today should be designed with ultimate enlargement contemplated. We recommend that consideration be given to a plant designed for 5 million gallons per day at the conventional rate of 2 gallons per square foot per minute of filter area, with provision for peak overloading to 6 million gallons per day.

(*c*) *Federal responsiblity.*—Determination of the degree or extent of Federal responsibility for the new plant would be exceedingly difficult, and will not be attempted here. Two parameters are, however, obvious: (a) The Garrison project has rendered the existing treatment plant less suitable for enlargement than previously prevailed, and (b) provision of an entirely new facility, at a new location and of capacity adequate for reasonable future needs, would constitute a replacement facility greatly above the level of replacement without betterment.

Respectfully submitted.

GLEN J. HOPKINS,
Sanitary Engineer Director.

Mayor BURK. The Army engineers recognize the Federal responsibility on the intake and the water transmission line and on the presedimentation basin. Our point of disagreement is on the necessity of abandoning our present water treatment plan, which is immediately on the edge of the city on the river bottom.

Our water treatment plant will be about a mile from the dikes, or a mile from the lakes. Our consulting engineer and our city engineer and the State department of health—and they have their statement here today—and the United States Health Department, all state that that plant should be moved. The reason for it is that the soil there is extremely porous. The operating maximum pool level at Garrison Reservoir will be 1,850, and as the silt builds up through the years that operating level will probably get higher. In addition to that 1,850 feet, you have about a 5-foot shore lap there, and the lowest part of our present city waterworks plant is down to 1,837.9 feet. That is where some of our outlets are.

Because of the porous nature of the soil there will be seepage there and our experts think they will waterlog, and because of that we will

have to move. We will be moving it for six and a half miles away on a hill. We have that increased cost of moving it there and then maintaining it, which we now do not have.

In the case of Clarksville, W. Va.—the Kerr Dam was mentioned before your committee yesterday—that case went to the United States circuit court of appeals, and I have the citation of it in my statement. The United States circuit court of appeals in substance held that it was the duty of the Government in an eminent-domain proceeding to put the city in as good a position as it was before. Regardless of the cost of the facility, it was entitled to a facility of an equal size, even though that cost more. That is what we are asking for in this bill.

We have the additional cost of operating our plant 6½ miles away, from now on until eternity, instead of having it right at the edge of the city.

In my statement I have detailed our city engineer's cost estimate of that. Now probably you would be interested in our city-debt situation. Under our State constitution a municipality can become indebted for 5 percent of its assessed valuation and by two-thirds vote they can increase it another 3 percent. Our city has done that. Our constitution provides that for a city waterworks and disposal system you can increase that an additional 4 percent. So our constitutional debt limit with that increase is $924,000. We have committed or general outstanding bonds of $376,000, so the total amount that we could bond with that increase of 4 percent is $560,000. Of course, you can issue revenue bonds. We have $260,000 in revenue bonds outstanding now. But if you get the amount too large then you have the danger of disposing of your revenue bonds at an unreasonable figure.

Mr. DAVIS. Any questions? Does the committee have any questions?

Mr. ROGERS. I have 1 or 2.

I notice in setting forth the cost of operating the treatment plant for your personnel there, you set down a charge for making a trip out there, I guess. You have 1 hour's lost time by your engineer and travel time lost, 1 hour per day for the men going out there. Is that incurred by going out to the plant and going back?

Mayor BURK. Yes. We have the plant now right at the edge of the city. If we put it out there they will have to go 6½ miles out and 6½ miles back every day, and we feel we have to pay our employees for that, or, if we do not do that, we will have to build homes out there for them to get to their work.

Mr. ROGERS. Six miles out?

Mayor BURK. Six and a half by road. Yes. You cannot travel on the river bottom.

Mr. ROGERS. What are the city limits of your town?

Mayor BURK. That is about 6½ miles from the city limits.

Mr. ROGERS. Do you pay your engineer to go from one limit to the other when he has a project down there?

Mayor BURK. Not within the city, but if we get out of the city we will have to, because they will lose an hour.

Mr. BECKER. Our people travel 20 to 30 miles back and forth to work every day, and they do not get paid for it. I think you have a good point, Mr. Rogers, in his including that in the cost.

Mr. BALDWIN. May I ask; do you have any precedent for the Federal Government paying the capitalized cost, and in addition to that the operating cost of a plant moving to a new location? We have relocated schools at various times, but I do not recall that we have paid the schoolteachers additional costs because they may have to travel a little farther to the school.

Mayor BURK. We are entitled under the Clarksville case to be put in as good a position as we were before. Our employees now do not have to travel that distance. If they have to spend an hour a day going to and from work, I am sure we will have to pay them for it. In other words, it is going to cost us that much more than it is costing us now.

Mr. BECKER. Mr. Chairman, I wish you had not included that because we have 350,000 commuters in my area going back and forth to New York City every single day. That is about 25 miles each way. It is at least an hour's time or more in travel. Each one of those commuters has a commutation cost and subway fare cost of approximately around $35 a month. Now you want to charge here the cost for 1 hour's travel time a day for 6½ miles. I wish that were not included in this cost. It is a very small figure.

Mayor BURK. In an industrial area they have to do that but out where we are they do not have to go more than a few blocks to work.

Mr. BECKER. But they want to work, though, do they not?

Mayor BURK. Oh, yes.

Are there any other questions?

Mr. BALDWIN. When you list this travel time lost, do you mean that you are going to compute the time they work from the time they leave home until the time they return to their home, as public employees? I do not know of anywhere else where public agencies compute the time that way.

Mayor BURK. Well, that may be true where you have a relatively high wage scale. Out in our community we have a relatively low wage scale.

Mr. BALDWIN. Can you cite any examples where a public employee is paid for his time from the time he leaves home until he returns home?

Mr. DAVIS. Portal to portal.

Mr. BALDWIN. Yes.

Mayor BURK. I cannot offhand. I believe I can cite some, but offhand I do not know.

Mr. BALDWIN. Thank you.

Mr. BURDICK. I might say a good example are Members of Congress. We are paid from the time we leave home until we get back.

Mr. BECKER. Only one round-trip, Mr. Burdick. I made 37 round-trips to New York a year, and I only get paid for one.

Mr. BURDICK. That is what I mean.

Mr. Chairman, I just want to call your attention to this section in regard to that wage. It really does not mean much in the bill anyhow, and probably may not be considered very much by you, but the point Mr. Burk made is a point I well know. When this dam was constructed it was provided that no interference should be had with the beneficial uses of those waters. When you say you want to protect the city, why, let us protect them, or else leave them alone the

way they were. They were satisfied. They did not ask to have this put on them. We were getting along fine without this high level. However, since you do have it, do you not think you ought to pay for it?

The next witness is Mr. Van Heuvelen of the Health Department of North Dakota.

Mayor BURK. Mr. Chairman, before I leave I would like to insert as a part of the record a summary of my costs, showing the additional amount we think we are entitled to under the Clarksville case.

Mr. DAVIS. All right. It may be made a part of the record at this point, without objection.

(The document referred to is as follows:)

Summary of cost

3-million-gallon intake	$151,700
Presedimentation basin and grit chamber	180,100
Electric transmission line to site of new facilities	12,000
3-million-gallon water plant	512,700
20-inch cast iron line	483,000
Total	1,339,500
10-percent increase in cost	133,950
Increased cost of having plant 6½ miles from city capitalized at 2½ percent for 25 years	165,835
Grand total	1,639,285

Mr. DAVIS. We are glad to have you, Mr. Van Heuvelen.

STATEMENT OF WILLIS VAN HEUVELEN, DIRECTOR, DIVISION OF WATER SUPPLY AND POLLUTION CONTROL, NORTH DAKOTA STATE DEPARTMENT OF HEALTH

Mr. VAN HEUVELEN. My name is Willis Van Heuvelen, director of the Division of Water Supply and Pollution Control of the North Dakota State Department of Health.

I am here representing the North Dakota Department of Health. I have talked to our Governor, Norman Brunsdale, on the health aspects of the relocation of the Williston, N. Dak., water treatment plant, and he is in complete agreement with our stand of our department on this matter.

By State law, plans and specifications for any additions or replacements to a municipal water system and treatment plant must be approved by the State department of health and the State water conservation commission before construction begins. Accordingly, we have a legal responsibility as well as a public health obligation in this case. Many technical questions are involved that have been given due consideration in several reports that are already on record. To keep my testimony brief, I should like to call your attention to the following three points which plainly state the position of our department.

Mr. DAVIS. Mr. Heuvelen, can you summarize your statement, because we have three other witnesses who want to get away.

Mr. VAN HEUVELEN. Could I briefly mention these three points which are the position of our department?

Mr. DAVIS. I think that would be fine.

Mr. VAN HEUVELEN. All right.

(1) We feel expansion of the Williston, N. Dak., water treatment plant at its present location is poor engineering, very undesirable, and is against the established approval policy of our department.

(2) The present water treatment plant is inadequate to serve the needs of the city of Williston and must be expanded. Until such time as this can be accomplished, we will permit operation—or would not object to its operation—at the present site. Although we do not feel that the present location of the plant when diked is desirable, we would hardly be justified in requiring discontinuation of its operation so long as it is capable of doing a satisfactory job.

There has been a proposal to provide supplementary diking. We agree if it were properly constructed, many of the health hazards would be removed from the present site. However, in our opinion this is poor engineering and we strongly urge that it not be built. Why locate a water treatment plant in an area where you admit there is a health hazard? By admitting the need of a supplementary dike it means you would have to make that available to keep it safe from any flooding in the future.

I think one of the most important aspects of the whole thing is that a water treatment plant must be approved by the State health deparmen, and according to the standard regulations of the State health department we should make no compromise in the matter of health when we are dealing with drinking water of 12,000 people. Our objection is to the site after the dikes are built.

That summarizes very briefly what I have to say.

Mr. DAVIS. Are there any questions?

Mr. ROGERS. You say the present water treatment plant is inadequate to serve the needs?

Mr. VAN HEUVELEN. Yes; it is.

Mr. ROGERS. So something will have to be done?

Mr. VAN HEUVELEN. Something has to be done.

Mr. DAVIS. Are there any questions?

(No response.)

Mr. DAVIS. Without objection, Mr. Van Heuvelen's complete statement will be inserted in the record at this point.

(The prepared statement of Mr. Van Heuvelen is as follows:)

STATEMENT OF WILLIS VAN HEUVELEN

Mr. Chairman, my name is Willis Van Heuvelen, director of the Division of Water Supply and Pollution Control, North Dakota State Department of Health. I am here representing the North Dakota Department of Health on the matter under consideration and have discussed the health aspect of the relocation of the Williston, N. Dak., water treatment plant with Governor Norman Brunsdale, who is in complete agreement with our stand on this matter.

By State law, plans and specifications for any additions or replacements to a municipal water system and treatment plant must be approved by the State department of health and the State water conservation commission before construction begins. Accordingly, we have a legal responsibility as well as a public health obligation in this case. Many technical questions are involved that have been given due consideration in several reports that are already on record. To keep my testimony brief, I should like to call your attention to the following three points which plainly state the position of our department:

(1) We feel expansion of the Williston, N. Dak., water treatment plant at its present location is poor engineering, very undesirable, and is against the established approval policy of our department.

(2) The present water treatment plant is inadequate to serve the needs of the city of Williston and must be expanded. Until such time as this can be accomplished, we will permit operation at the present site. Although we do not feel that the present location of the plant when diked is desirable, we would hardly be justified in requiring discontinuation of its operation so long as it is capable of doing a satisfactory job.

(3) If any proposal of supplementary diking for the water plant as a means of protecting and insuring a safe water supply were considered, we agree that, if properly constructed, this would remove many of the hazards of the present site and then meet our qualified approval. However, in our opinion, this is poor engineering and strongly urge that a secondary dike not be built. The cost of building (approximately $100,000) and maintaining this extra dike is poor business. In the matter of health, we want the best installations possible. Why locate a plant in an area that admittedly needs protection when another very desirable site is readily available? If the plant were double diked it would be necessary to include an extensive dewatering system within these dikes. This would involve a continuing operation expense to the Federal Government. Plant construction costs would also be higher in this area because special precautionary measures in plant design and construction would be required. Our objection is not to the site as such, but to the placing of a water plant behind a levee or dike and depending on such for protection against flooding. This is not good public health practice and is contrary to our regulations.

One of the most important aspects of the decisions regarding the site of a water treatment plant has to do with public health and the approval of the plans and specifications by the State health department. Any investigation of this problem without consideration of State law, health department rules and regulations, and attitudes of health officials of North Dakota should be questioned.

No compromise should be made in the matter of health. No doubt a few dollars can be saved by expanding facilities at the present site. However, when dealing with an essential item such as pure drinking water, we cannot gamble with safety. If double dikes are necessary at the present site of the water plant, we are admitting a health hazard and must recognize that during extreme conditions, a possibility of flooding exists. Our department, when considering the requirements for a safe water supply for 12,000 people, wants a water treatment plant located in a secure area where flooding is not a problem, even in the extreme conditions.

May I thank you for the privilege of allowing me to appear before you today.

Mr. DAVIS. All right, Mr. Burdick.

Mr. BURDICK. Mr. Burdick, our consulting engineer of Grand Forks, N. Dak.

Mr. DAVIS. Oh, another Mr. Burdick. Will you summarize your statement, please, Mr. Burdick?

STATEMENT OF L. W. BURDICK, CONSULTING ENGINEER, GRAND FORKS, N. DAK.

Mr. L. W. BURDICK. I wonder if it is necessary for me to read it? You folks all have it here and I might answer any questions you have.

Mr. DAVIS. It will be made a part of the record at this point.

(The prepared statement of Mr. L. W. Burdick is as follows:)

STATEMENT OF L. W. BURDICK

Mr. Chairman, my name is L. W. Burdick of Grand Forks, N. Dak., and I also appear in support of H. R. 10990.

For more than 40 years I have been engaged in consulting engineering work in North Dakota, Minnesota, and Montana, except a few years spent in municipal contracting. During the time I spent in contract work I built the Williston Water Treatment Plant. Due to the fact that I have lived and worked in Williston several years as a contractor and as their consulting engineer on their water and sewage systems I am very familiar with the city's problems relative to water and sewage.

We were engaged in 1954 to make a report on the present water supply system for the city of Williston and make recommendations and estimates of what

it will cost the city to rebuild the water supply system when the Garrison Reservoir has been put into operation.

From information made available by test wells installed by the Corps of Engineers we find that the ground water in the area varies directly with the rise and fall of the Missouri River water level.

The elevation of the floor of the clear well under the present filters is 1,841.4 feet and the proposed elevation of the Garrison Reservoir is 1,850 at the dam with a probable elevation of 1,855 at Williston. It is also possible that due to aggradation in the future that the water elevation of the reservoir could be at least 1,860 at Williston.

This would put a head of approximately 20 feet on the floor of the clear well under the filters, and if the underground pressure could not be removed by pumping, the whole plant would be flooded out.

As protection against this possibility the Corps of Engineers has proposed a system of relief wells. We have had considerable experience with wells in North Dakota and have found in most cases where the formation is of glacial drift, and underlayed with layers of clay, fine sand and gravel, the wells do not draw the water table down for a great distance from each well. Then the well screens soon plug up with mineral formations, and the wells become inoperative. This would require a continuous expense of pumping, cleaning wells, and digging new wells. It would not assure the city of Williston continuous protection from underground flooding of the water-plant area.

We have found, due to the uncertain protection that the proposed dikes will give to the present water treatment plant location, it would not be feasible or wise to plan an unlimited treatment plant expansion at the present location. The present location is made still more undesirable by the fact that a new intake system must be constructed upstream about 6½ miles by road from the present treatment plant.

The new intake system will consist of intake pipes into the Missouri River. A pumping station with mechanically operated screen to remove the floating material from the river water will be necessary, as will a mechanically operated grit chamber to remove the sand from the water, and a mechanically operated presedimentation basin. This will reduce the turbidity of the water to a volumn that is feasible to be handled in the water treatment plant. All this will make it necessary to maintain a crew of operators at the intake system as well as at the treatment plant. If the intake system and water-treatment plant were built adjacent to each other, one crew could operate both systems at a great saving in labor cost.

Having to move the raw water intake more than 3 miles farther from the city of Williston than is now necessary, due to the construction of the Garrison Dam, will put an extra burden on the cost of producing water that must be paid for by someone. We believe the approximate 16,000 feet of extra pipeline should be paid for by the Federal Government and should be of sufficient size so that it would not have to be replaced in the foreseeable future and the cost borne by the city of Williston.

We believe that the intake system and the transmission line from the intake system to the city distribution system are unexpandable items and without a great increase in cost they could be made large enough now to take care of probably future needs for the next 30 years. Their costs, we believe, should be paid by the Government. The water treatment plant should be expanded in units of the necessary size required and the cost of the future additions then should be paid by the city of Williston.

Our estimate of cost for the different items have been concurred in by the Corps of Engineers. We believe they were conservative at the time they were made. Due to increased freight rates and material prices, estimates are probably about 10 percent below what we should estimate our costs, if the work is to be done this year.

I wish to thank the members of the committee for the time I have used and hope that you will treat the situation at Williston the same as you would your own hometown.

Mr. DAVIS. Are there any questions?

Mr. ROGERS. I wondered, since something will have to be done to the water system that you have at present, do you feel you will have to make some change before too long?

Mr. L. W. BURDICK. The present plant location would be approved if it were not for this high water level of the Garrison Reservoir.

Mr. ROGERS. I understood from your statement that something would have to be done anyhow, as it would not be sufficient to meet the needs of the city.

Mr. L. W. BURDICK. No; the present plant has to be expanded.

Mr. ROGERS. That is what I understood.

Mr. L. W. BURDICK. That is true. Yes.

Mr. ROGERS. You are going to have to do something to the plant.

Mr. L. W. BURDICK. Now they get water out of the river. About half of the water comes out of the river and about half from wells. When the demand is low in wintertime they use river water all the time, and when they run out of river water they supplement that with wells.

Mr. ROGERS. Thank you.

Mr. SCHWENGEL. I have one other question. Do you have figures on what the improvement costs will be if you include them at the present site? Do you have costs on those figures that you can leave with the committee?

Mr. L. W. BURDICK. We have not gone into that phase of it because we have never considered rebuilding the whole plant at the present location, because we have the Garrison Dam with us now and we cannot expand where we are.

Mr. DAVIS. Are there any further questions?

(No response.)

Mr. DAVIS. Thank you, sir.

Who is next, Mr. Burdick?

Mr. BURDICK. Mr. W. S. Davidson, president of one of the largest banks in North Dakota, located in Williston.

Mr. DAVIS. We are glad to have you, Mr. Davidson.

STATEMENT OF W. S. DAVIDSON, PRESIDENT OF A BANK, WILLISTON, N. DAK.

Mr. DAVIDSON. Mr. Chairman, I have no prepared statement and I will not take very much time. I have been leading this fight since 1944.

First our committee met in Omaha and they agreed on an 1,830-foot pool, which was 17 million acre-feet, with this agreement, that when Congress permitted the pool to be raised above 1,830 feet we would offer no objection. I have made over a dozen trips and testified in Washington in the last 10 years. If my friend Lemke had not died and my friend Burdick had not gotten married last year, I do not think you could have beat us, but here is the deal they made: That the Secretary of the Interior and the Army engineers and the Bureau of Reclamation must agree on the pool level. They agreed at 1,830 feet to start with and last year Congress agreed to let them go to 1,850. That is a tremendous loss to Williston.

We went through the drought, the low prices, and everything else. We now have a respectable city. The river bottoms mean everything to western North Dakota. When the South Dakota dams are completed there will be 8 miles of river bottom left in the entire State of North Dakota.

I happen to be the largest cattle raiser in North Dakota. We took our cattle through the drought—no crops, and no grass on the river bottoms. You have taken all of that away from us. You have taken away from the Williston trade territory 90,000 acres of our best productive land.

Now we know that our water plant which we are asking you to help us pay for is larger than we need at this time, but we must bring in other enterprises to maintain our city if we are going to exist. We have a refinery there now that will take a large amount of water, and we must go out and get other industries to replace the income of that 90,000 acres which you have taken away from us. In addition, you are taking our only irrigation district in the State of North Dakota. The eastern part of the State does not want irrigation. Two years ago we came down here with farmers signed up against us. There were 675 farmers which included over half of the acreage when the Army engineers all at once got into the irrigation business. The farmers in the eastern part of the State get lots more rain than we do. So you have taken 90,000 acres away and taken practically the only two irrigation areas in the State away from us, and you are disposing of our sewage and water system, because Williston will never take the water out from behind the dikes for drinking purposes. We have testified time and time again for the appropriation for the Army engineers for any amount they want. We have always testified for them to build the dam at any height the Army engineers recommended.

We understood when they started out $100 million would build that dam. Today they have over $300 million invested there and I do not know what good it is, because the people in the eastern part of the State are not going to irrigate. So I think that Congress has now permitted the 1,850-foot pool which we have fought bitterly for 10 years. So you could be a little liberal and not burden our property owners in the city of Williston to expend $2 million for a water plant.

I sincerely hope you will take into consideration the fact that we happen to be in a bad location, which is at the Garrison Pool. Our ranchers have now lost their fields. We have lost all our meadows and it is a bad situation. But if you will help us to get a sufficient supply of water, and we have an abundance of coal, and we can bring in some other enterprises, then that will help us out.

I want to thank you very kindly.

Mr. DAVIS. Mr. Burdick.

Mr. BURDICK. The last witness is Mr. Albers of the city commission of the city of Williston.

Mr. DAVIS. He is not on our list, but you have apparently added him. All right. Come along, sir.

STATEMENT OF CARL ALBERS, MEMBER OF THE CITY COMMISSION OF WILLISTON, N. DAK.

Mr. ALBERS. Mr. Chairman, I will take only about a half a minute of your time. I appreciate it very much.

Mr. DAVIS. You are on the city commission?

Mr. ALBERS. Yes. I am Carl Albers, a member of the city commission. I am engaged in the retail business in the city of Williston.

I appreciate the opportunity to speak for a minute to reiterate a few of the statements made by Mr. Davidson and in support of our request. I speak for practically all of the business people in our city.

Williston has had an attraction to many of us, particularly in recent years, for two reasons, and these were the things that attracted me to it. First, it lies in the rich Missouri Valley. Second, it has had two irrigation projects. These have meant a great deal to us. They have meant a more stable economy for us. It has been a so-called insurance against the time of drought on the uplands. This was something that our business lacked about 100 miles away.

Now a great deal of this is being taken away from us as the result of the Garrison Reservoir.

In our request, Mr. Chairman, which we hope you will give reasonable consideration, we hope to make it possible for us to develop other things to replace the economy we are about to lose.

We are in the process now of spending money to recruit some type of industry to our area, and it does look favorable. However, any industry that might be considered requires a great amount of water.

Gentlemen, we do not feel our request is unreasonable. Our people are about to suffer great losses, great to us at least, for the benefit of thousands of others. We are willing now to make these sacrifices, but do feel that we are entitled to consideration now.

Thank you very much.

Mr. DAVIS. Thank you, Mr. Albers.

Mr. BURDICK. Mr. Chairman, I want to take this accasion to thank you and the members of this committee for giving us this free and open hearing. We have said all we want to say and there is not any more we want to offer.

Mr. DAVIS. All right. Thank you.

I think we had better hear from General Itschner briefly on the matter. We have listened to the proof so far presented.

STATEMENT OF MAJ. GEN. E. C. ITSCHNER, CORPS OF ENGINEERS—Resumed

General ITSCHNER. Mr. Chairman and members of the committee, with your permission I would like to submit a prepared statement in order to save time, but I would just like to summarize it very briefly.

The Department of the Army is opposed to the enactment of this bill, and it takes this position regretfully, especially in view of the fine spirit of helpfulness and cooperation and friendliness that has characterized the discussions we have had over a long period of time with Senators Langer and Young and Congressman Burdick, and the officials and the people of Williston.

The Chief of Engineers has proposed and has the authority and the funds to provide a new water intake and a raw water maintain, which proposal we think would constitute an equitable and reasonable settlement for replacement of the facilities affected by the Garrison project.

The cost of this work is estimated to be $686,000. You will notice, Mr. Chairman, that we are not proposing to provide a new water-treatment plant. That is where the difference exists.

Our system would have a capacity of 3 million gallons of water a day. The system desired by the city of Williston would have gen-

erally a capacity of 6 million gallons a day, with an intake with a capacity of 36 million gallons a day for future expansion.

Mr. ROGERS. General, may I ask a question? What is the present capacity?

General ITSCHNER. I was going to get to that, sir. The present capacity of the intake system, which is the part being replaced, is 1,600,000 gallons per day. But in addition thereto, they have two wells which have a capacity of 1,500,000 gallons a day, which are used only in times of extremely high demands for water. Those wells would still be operable after the project is in operation.

The State of North Dakota, through its public health department, contends that the site of the existing plant is not suitable for use or for the currently needed expansion because they feel it will be poor practice to locate such a plant at a site protected by a levee, even though the water will be against that levee only about 5 percent of the time.

Mr. BECKER. I could not hear that, General. Would you repeat it, please?

General ITSCHNER. The water will be against this levee only about 5 percent of the time.

Mr. BECKER. What water do you mean? The water they would use would be against the levee?

General ITSCHNER. This levee would protect the town of Williston against the waters of the Garrison Reservoir only very infrequently, when that reservoir is filled up to extremely high stages for storing floodwaters. Normally the water will not touch the levees at Williston. Five percent of the time is our estimate of the maximum time that water will be touching the levee.

Mr. BECKER. Thank you.

General ITSCHNER. The city's position is predicated on the remote possibility that the levees will be overtopped, thus contaminating the water supply and putting the treatment plant out of service. Actually, without the reservoir, floods could render the plant inoperative as it is. The outlet of the treatment plant will be flooded from interior drainage back of the levee only about one-third of the frequency with the protection proposed as it would be under natural river conditions. We have made extensive studies, and we retained the firm of Horner & Shifrin of St. Louis, Mo., one of the outstanding consulting firms in the country, particularly on water matters. My statement will contain their complete conclusions, but I should like to read just two of them, as they are very brief.

They conclude first that the consultants do not consider that the construction and operation of the Garrison Reservoir project by the Federal Government will adversely affect the continued operation of the existing water-treatment plant at Williston with the new intake desilting basin and raw-water line as proposed. The latter means that the Corps of Engineers does propose to construct a new intake and desilting basin on the raw-water line.

The second conclusion is:

> From a public health standpoint and in recognition of the fact that there is adequate space available at the site, the consultants considered that it is feasible to expand the existing facilities at their present location. The public health aspects in this case are the same as in the prior conclusion, and the reasons given in answer to that question also apply here.

My full statement will have those questions and answers and reasons.

Mr. DAVIS. Without objection, the full statement of Major General Itschner will be made a part of the record at this point.

(The complete statement is as follows:)

COMMENTS ON H. R. 10990—WILLISTON, N. DAK., WATER FACILITIES

H. R. 10990 is a bill "To authorize the Corps of Engineers to compensate the city of Williston, N. Dak., for the acquisition and replacement of the municipal water supply and water treatment facilities which will be damaged, impaired, or rendered inoperative by the construction and operation of Garrison Dam and Reservoir on the Missouri River."

The Department of the Army is opposed to this bill. It takes this position regretfully, especially in view of the fine spirit of cooperation, helpfulness, and friendliness that has characterized the discussions with Senators Langer and Young and Congressman Burdick, and the officials and citizens of the city of Williston.

The purpose of the bill is to provide for the payment by the Corps of Engineers to the city of Williston, for the construction or provision of water-supply and water-treatment facilities at a cost not to exceed $2,200,000 as compensation for the alleged damage to existing facilities as a result of the construction and operation of Garrison Dam. This amount would provide a completely new water intake and raw water main with a capacity of 36 million gallons per day, and a desilting basin, grit chamber and water treatment plant with a capacity of 6 million gallons per day.

The Chief of Engineers has proposed and has the authority and funds to provide a new water intake and raw water main, which proposal would constitute an equitable and reasonable settlement for replacement of facilities affected by the Garrison project. The estimated cost of this work is $686,000. You will notice that the Corps of Engineers does not propose to provide a new water-treatment plant. The capacity of this system would be 3 million gallons per day, and it would include an intake in the river, a wet well on the bank, a grit chamber, mechanical desilting facilities, and a 16-inch cast-iron raw water main.

This proposed work constitutes a generous settlement when it is realized that the facilities replaced consist of a 1,600,000 gallon per day intake and raw water main 12 inches in diameter, constructed in large part of pipe inferior to the cast-iron pipe proposed as a substitute. However, the improvement is justified as compensation for the longer distance water must be pumped in the replacement system. The existing system also has two wells which are used only when water consumption is high to produce 1,500,000 gallons per day. These wells will still be operable after Garrison Dam is in operation.

The Chief of Engineers considers that there is no justification for the replacement of the water-treatment plant, although the health department of the State of North Dakota contends that the site of the existing plant is not suitable for use or for currently needed expansion because they feel it is poor practice to have a water treatment plant behind a levee, even though water will be against the levee less than 5 percent of the time.

The State's position is predicated on the remote possibility that the levees could be overtopped, thus contaminating the water supply and putting the treatment plant out of service. Actually, without the reservoir floods could render the plant inoperative. The outlet of the treatment plant will be flooded from interior drainage only one-third as frequently with the protection proposed as it would under natural river conditions.

Extensive engineering studies have been made by the corps and by private consultants to determine the possible effects of the project on the city's plant. The firm of Horner & Shifrin of St. Louis, one of the outstanding consulting engineer firms in the country, made a report and concluded as follows:

"On the basis of the studies which the consultants have made and the analysis of the problem as developed in the foregoing sections of this report, the following answers are given to questions presented to the consultants:

"The directive specifies that the conclusions reached be based on good engineering practice and public-health considerations.

"Question 1. Determine whether construction and operation of the Garrison Reservoir project on the Missouri River by the Government will adversely affect the continued operation of the existing city-owned water treatment facilities.

"Answer. The consultants do not consider that the construction and operation of the Garrison Reservoir project by the Federal Government will adversely affect the continued operation of the existing Williston water-treatment plant with the new intake, desilting basin, and raw waterline as proposed.

"This conclusion is reached on the basis of the following:

"(*a*) The consultants do not consider that ground water conditions will be adversely affected by the project to such an extent as to constitute a sanitary hazard at the plant, creating the likelihood of ground water infiltration into the clear water storage reservoirs of the plant. Actually, they consider that the highest ground water levels will be reduced because the ponding levels in the interior of the protected areas which constitute the level of relief of ground water will be lower than the flood levels occurring with the natural river.

"(*b*) The consultants do not consider that the possibility of overtopping of the levee or of internal flood is sufficient to condemn the site. They consider that there is an obvious continuing Federal responsibility to make and maintain the protective works adequate under all circumstances now and in the future.

"Question 2. Determine feasibility of expanding the existing facilities at their present location.

"Answer. The answer to this question is given in two categories; one, as to physical feasibility and two, as to economic feasibility.

"(A) Physical feasibility: From a public-health standpoint, and in recognition of the fact that there is adequate space available at the site, the consultants consider that it is feasible to expand the existing facilities at their present location. The public-health aspects in this case are the same as in question (1) and the reasons given in the answer to that question also apply here.

"(B) Economic feasibility: From the standpoint of good engineering practice, the consultants consider that a careful analysis of all factors in this case will develop that a new facility at an upland site for the present and near future needs can be economically justified in lieu of expanding the existing plant.

"The consultants have reached this conclusion on the basis of the following:

"(*a*) The existing plant has an uneconomical design from the standpoint of the number of pumping operations, and hence expanding it with like pumping arrangements probably would result in higher cost for such an expansion than providing the same additional capacity at an entirely new site.

"(*b*) The salvagable capacity in the existing plant if it is to be continued in operation is only the 1.2 to 1.6 million gallons daily of treatment capacity for raw Missouri River water since the present wells supplementing the existing treatment-plant capacity are not a satisfactory source from a water-quality standpoint.

"(*c*) Good engineering judgment would indicate that the city should now have a supply providing 5 to 6 million gallons daily of capacity or about 4 times the capacity of the existing treatment plant in order to meet the water demand of the present population which probably is on the order of 4 million gallons daily and to have some allowance for near future growth.

"(*d*) The fact that the most satisfactory new intake site is located a considerable distance away from the city (the Lewis and Clark Bridge site) and that intake facilities cannot be economically or reliably provided in the reservoir adjacent to the existing plant, produces an economic advantage in favor of a new plant site at the Lewis and Clark Bridge for the full capacity. A full capacity plant at this location would make possible the development of the area between the city and the bridge. Whereas the adoption of an alternate expanding the present plant at its existing site would provide only a raw waterline in this reach and the adoption of an alternate retaining the existing site with the expansion taking place at a higher site would involve as much, if no more, raw water piping which would not be useful to future water customers along its route.

"(An allowance would be justified in an economic comparison for incurring a slightly higher cost for a facility entirely removed from the levee area because of the elimination of a presumed flood hazard.)

"Question 3. In the event the degree of effect of Garrison project from a sanitary engineering standpoint is of sufficient magnitude to offset economic aspect of enlargement or precludes enlargement of existing facilities, determine criteria for provisions of an economic alternate approach including possible provisions to make existing facilities acceptable for expansion.

"Answer. (A) If the question is predicated on an answer being given only if the consultants' conclude that there is an adverse effect from a sanitary

engineering standpoint, then there is no need for an answer since in the consultants' judgment there is no adverse effect.

"(B) However: (*a*) If, in the judgment of public health authorities as is indicated in the expressions that have been rendered in this case, the plant by virtue of being within a leveed area is vulnerable from a public health standpoint because of the possibility of flooding, it is the consultants' conclusion that the only provision which would render the existing plant acceptable for expansion would be the construction of a secondary levee around it higher than the reservoir levee. Pumping facilities would be required for wash water and plant drainage. The additional capacity to the plant could be designed with a flooding level possibly at elevation 1,865 to 70 thus providing for itself a high degree of reliability against flood. The dual flow sheet would not be attractive, and probably would not permit this alternate to survive in an economic comparison.

"(*b*) If, in the judgment of public health authorities, there is concern that there is possibility of ground water contamination of the clear water storage facilities of the existing plant or of the expanded plant (such possibility is not specifically pointed out in the expressions of public health authorities in this case), possible means of coping with the problem of high ground water are as follows:

"(The consultants do not consider that high ground water will constitute a problem except under a condition of complete failure of the protective works.)

"1. Abandonment of the clearwell under the filters and possibly of the existing higher level clearwells using direct pumping from the underdrains of the present filters and any new filter installation. This method has been used in recent years to eliminate the need for low level clearwells at plant sites where ground water is a problem. Actually, better economy is to store clear water at the highest possible level within the distribution system whereby a moderate amount of pumping will make it available to consumers. (Such facility of 3 milligrams capacity already exists in the system.) An elevated wash water tank will be required if the plant clearwells are abandoned.

"2. A system of relief wells could be used around the plant inside of the secondary levee to keep internal ground water below the clearwell bottoms at such times as a failure of the primary protective works brought floodwaters against the secondary levee.

"3. The plant could be operated with a 'flooded' clearwell during periods of danger from ground water which would mean that the ground water would have to rise to about elevation 1,852 before infiltration would be possible. This level allows for about 6-foot loss of head through the filters. The success of this emergency provision depends on the plant operators, and hence it is subject to personnel negligence.

"(*c*) If correcting the existing site for expansion as outlined above in (*a*) and (*b*) to make it satisfactory for the requirements of public health authorities proves uneconomically justified, the most satisfactory and economical alternate in the consultants' judgment would be the development of a plant for the full capacity at the Lewis and Clark Bridge as has been proposed with a finished water supply main to the city."

After these thorough studies, the Chief of Engineers determined that the water treatment plant is not subject to adverse effect as a result of the Garrison project. Accordingly, there appears to be no legal or equitable obligation upon the Federal Government to participate in the replacement or alteration of the water treatment plant as proposed in this bill.

General ITSCHNER. Therefore, in conclusion, sir, the Corps of Engineers feels, and we say so regretfully, that there is no basis for going beyond the amount of replacement for which we have funds and authority.

Mr. DAVIS. I am going to ask the committee to withhold questions for just a moment. This is the first time I have ever been honored by a group from my city who happen to be in Washington at this time. We have more than 40 of our fine younger citizens from Memphis, Tenn., present here today. Unfortunately they are here at a time when they find me engaged in the work of this committee. Yet, in another way I am fortunate that they see me on the job this morning.

I trust they will report back to those older members of my constituency that they found me at my place of duty.

I want you to know that this is the Subcommittee on Flood Control of the House Committee on Public Works. We are considering a great many projeacts which may be included in an omnibus flood-control bill. You see before you one of our distinguished Army engineers, Major General Itschner, who is testifying on a matter before us. The Democrats sit on this side and the Republicans sit on this side.

I am very delighted to see you young ladies and gentlemen in this committee. We take a very broad bipartisan view of these important public works matters, because flood problems affect all of the people all the way up and down our great country.

I recognize that Mr. Wright has a very strenuous program for you. You will see a great many things, but I just wish to point out you are in a committee room of the House and you are seeing a committee at work. I would like to make you a little speech about what we do, but I cannot do it now, as much as I would like to, because we have such a hard and long program before us.

The committee has been very cooperative and we are trying to close hearings today, because we are working against time on this program. This is a committee which has public buildings and grounds, rivers and harbors, roads—the highway bill originated in this committee as far as the House side is concerned—and, of course, we have flood control all within the purview of this committee.

I do hope that I get to see all of your personally before you leave the city, and Mr. Wright will explain some of the other details as you go along. Thank you so much for dropping by this morning.

Are there any questions from this side of the aisle?

Mr. ROGERS. Mr. Chairman, before your group leaves I think they ought to know of the high regard this committee holds for its chairman. The Congressmen and members on both sides of this committee think Mr. Davis is one of the finest and most able chairmen in the Congress.

Mr. JONES. I am glad you pointed out to your splendid group the provisions we have for the members on the right and the left, but I would like to inform them that the most important thing in our committee is not the right or the left, but the center.

Mr. DAVIS. Well, this is a very unusual procedure, young ladies and gentlemen, and I am very grateful to you for these nice expressions, because I feel a very deep affection for every last member of our subcommittee. I have so often said that I think we have the best subcommittee in the whole House of Representatives.

Mr. BECKER. That, Mr. Chairman, is only because we have the best subcommittee chairman. I, speaking for the Republicans on this side, to your young guests from Memphis, Tenn., want to say that we hold Mr. Davis in the highest regard. When he said the committee is bipartisan, we act that way because of his leadership, which does not permit politics to come into it.

Mr. Chairman, I am delighted to see this young group of yours here, and I am sure you will see them before they leave.

Mr. DAVIS. Thank you. I am looking forward to that. Thank you again, all of you.

Now we will have some questions.

Mr. ROGERS. Mr. Chairman, I do have a question.

Mr. DAVIS. Mr. Rogers.

Mr. ROGERS. What do you propose to do, General, where the Public Health Service does not approve the plan? Does that constitute an insurmountable hurdle to the solution of this problem?

General ITSCHNER. I would like to read a statement by Mr. Glen Hopkins, who is the sanitary engineer director of the United States Public Health Service in that region. He concludes as follows:

Provision of an entirely new facility, at a new location and of capacity adequate for reasonable future needs, would constitute a replacement facility greatly above the level of "replacement without betterment."

Mr. ROGERS. Thank you.

Mr. DAVIS. Are there any questions on this side?

(No response.)

Mr. DAVIS. Thank you, General.

FLOYD RIVER, IOWA

We will pass now to the next project, which is Floyd River, Iowa, House Document 417. We are trying to accommodate our colleagues here and we will hear from Colonel Dalrymple first, representing the Corps of Engineers.

STATEMENT OF LT. COL. ROBERT DALRYMPLE, CORPS OF ENGINEERS—Resumed

Colonel DALRYMPLE. Mr. Chairman, this is a review report on the Floyd River report of May 9, 1939, and prior reports, with a view to determining if improvements in the interests of flood control are economic at this time, authorized by a resolution of the House Flood Control Committee, adopted March 29, 1944.

Floyd River Basin is located in northwestern Iowa in this vicinity. The Floyd River Basin is nearly 68 miles long and roughly 25 miles wide, having a drainage basin of about 956 square miles. There are no existing Corps of Engineer projects in this area. However, in the vicinity of Sioux City there have been some WPA and joint Sioux City projects which were completed in 1940, consisting of channel straightening, lining, enlarging, and realinement which have assisted in some reduction of flood flows there.

The problem here is that of extremely heavy floodflows occurring in May, June, and July of each year, due to concentrated and heavy rainfall, which can be as much as four inches in a 24-hour period, with a very rapid runoff, and consequently flooding the basin, and particularly the city of Sioux City, Iowa.

There have been 62 major floods in the last 85 years, of which 7 were of major proportions. The flood of record is that of June 8, 1953, at which time roughly 71,500 cubic feet per second were discharged above Sioux City and flowed through Sioux City, Iowa. This compares with a channel capacity of roughly 13,000 in the upper reaches and varying to 25,000 cubic feet per second in the lower reaches. The damages of the flood of record totaled approximately $25,600,000, of which $23,185,000 were at Sioux City. Fourteen lives were lost. Forty-five lives have been lost in the basin due to flooding.

A major flood threat does exist in the basin, and a comprehensive plan for the improvement of the Floyd River and its tributaries is not economically justified, nor is it desired by the local interests at this time. However, local flood protection against the maximum flood of record for Sioux City, Iowa, is urgently needed and justified.

The plan proposed consists of 5.3 miles of channel realinement and levees, 0.6 miles of vertical extension of the concrete flood wall along this channel, and the construction of a new auxiliary channel approximately 1.3 miles in the lower vicinity that you see here.

The total estimated cost based on current price levels is $11,700,000, of which the Federal cost would be $8,060,000. The non-Federal cost would be $3,640,000, including a cash contribution estimated at $67,700.

The annual charges are estimated at $464,500, and the annual benefits at $806,200, resulting in a benefit-cost ratio estimated at this time to be 1.74 to 1.

In addition to the cash contribution I mentioned, local interests are required to provide lands, easements, and rights-of-way; hold and save the United States free from damages from construction; make all utility, highway, and highway bridge alterations and additions necessary; operate and maintain the project after completion in accordance with regulations prescribed by the Secretary of the Army; and contribute in cash as I mentioned, an estimated $67,700, which is 0.84 percent of the estimated first cost of the work to be accomplished by the Federal Government.

In addition local interests are to prevent encroachment upon the right-of-way after authorization within the limits of the Iowa law.

Mr. ROGERS. Colonel, is there any "hold and save free from damages" clause?

Colonel DALRYMPLE. Yes, sir. That is required. The normal A, B, C's are in there, including hold and save the United States free from damages during construction and operation.

Mr. ROGERS. All right.

Colonel DALRYMPLE. In commenting on this report, the Bureau of the Budget noted that the plan of improvement provided for a freeboard of only 2 feet, and incorporates 3 railroad bridges which will partially obstruct the design flows. They noted also that the Board of Engineers made comment on this and also the Iowa State Natural Resources Council made comment on it. The Bureau of the Budget indicated that inasmuch as the Board of Engineers recommended restudy of this matter should be undertaken after authorization, that possibly an increase in the cost to the Federal Government might arise. Therefore if the cost did increase substantially the Bureau of the Budget would expect a report be furnished them on the economics and benefits of the project prior to the presentation of any request for appropriations.

Comment was also received from the Secretary of Commerce, pointing out that Federal-aid highway funds would not be applicable to any bridges in this project inasmuch as these funds cannot be used when local interests are required to provide the necessary alterations to the highway bridges and highways.

The Chief of Engineers recommends the authorization of the improvements as reported.

That is all I have.

Mr. DAVIS. Thank you. Are there any questions on this side?

(No response.)

Mr. DAVIS. Any questions over here?

(No response.)

Mr. DAVIS. Mr. Hoeven.

STATEMENT OF HON. CHARLES B. HOEVEN, A MEMBER OF CONGRESS FROM THE STATE OF IOWA

Mr. HOEVEN. Mr. Chairman and gentlemen of the subcommittee, may I say that I sincerely appreciate the opportunity of appearing before your subcommittee this morning. It is my privilege to represent the Eighth Congressional District of Iowa in the Congress and, as you may know, the entire Floyd River Basin, which is reported in House Document 417, 84th Congress, is located within my district. Therefore, I have had a keen interest in the Army engineers' survey of the Floyd River and tributaries as well as a satisfactory solution to the flood-control problems which have confronted my constituents for many years.

Flood control has been a perennial problem in the Floyd River Basin since 1892, and since that time there have been periodic disasters of considerable magnitude. Shortly after coming to Congress, I introduced a resolution which was adopted by the Committee on Flood Control of the House of Representatives on May 29, 1944, calling for a review of the situation existing in the Floyd River Basin, with a view to determining if improvement in the interest of flood control would be feasible. Due to the fact that the United States was at war at that time, and because of the subsequent readjustment to a peacetime economy, it was not possible to begin active investigation of the Floyd River survey until June 1948. The investigation proceeded at a normal rate until it became necessary to suspend operations during the fiscal year 1950 because of inadequate funds. In view of the long period which has elapsed since the inauguration of this survey, I am immensely pleased that the report has been completed and that congressional consideration is now possible.

Flood disasters have been very much in the news during the past several years. We in northwest Iowa can sympathize with the people of the east and west coasts because we know from experience what an uncontrolled inundation of floodwaters can do to the life of a community. On June 8, 1953, the entire Floyd River Basin in northwest Iowa experienced the most disastrous flood in the basin's history. It is significant this is June 8, 1956.

Mr. DAVIS. It is that.

Mr. HOEVEN. From the standpoint of both loss of human life and damage to property, this flood also ranks among the most disastrous floods of record for streams of its size in the entire Missouri River Basin. The Corps of Engineers estimated the damage at approximately $25,603,000. No one will of course attempt to estimate the value of the lives lost during this disaster, a total of 14 individuals perishing in the Sioux City, Iowa, area. These victims were primarily elderly people who had lived in the flood area for many years, but were unable to fleet their homes fast enough to escape the advancing floodwaters.

In the upper reaches of the Floyd River on that particular day there were 11 inches of rainfall.

In the 3 major floods of the past 61 years in Sioux City, 45 people have been drowned. In the flood of 1892, 25 people lost their lives; 6 other lives were lost in 1926.

The damage caused by the flood of June 1953 greatly exceeded throughout the basin the damages caused by any previous flood. At Sioux City alone, a total loss of $23,185,000 was approximately 20 times the damage reported for the floods of 1892 and 1926, despite the fact that the channel had been improved since those earlier floods.

I would like to call attention to the fact that Sioux City is the second largest city in the State of Iowa, with a population of approximately 85,000 people. This project is about the most important thing I can think of for the development of that area. Anyone who will visit that community knows that the only possible sites for industrial development are in the Floyd River Basin. Due to these flood hazards throughout the years, capital just refuses to come into the city. In the past several years there have been meetings held throughout the city, and I am pleased to announce there is unanimous agreement on the part of the city and farmers and everybody that something should be done to relieve that flood hazard.

The project is before you today, I hope for your sympathetic consideration, because the people in the Floyd River Valley are living in fear. As has been stated, every year we run the risk of these heavy floods, which do destroy property and destroy lives.

We hope we can get started on this project with dispatch, because, after all, after the program is finally authorized and the initial appropriation has been made, it will take a period of 5 years in order to complete the project as now contemplated.

In connection with my remarks, I would like to have the privilege of providing for the record a letter from Mr. James R. Smith, manager of the Missouri River division of the Mississippi Valley Association. That letter speaks for itself, but this is one of the significant paragraphs in that letter, which reads as follows:

> Of all the urgent situations in the entire Missouri Basin, the threat of the Floyd River to Sioux City, Iowa, is the most serious.

I would now like to present a gentleman from Sioux City, here representing the local interests of the city of Sioux City, the Sioux City Chamber of Commerce, Mr. Robert E. Gleeson, chairman of the Floyd River flood-control committee, Sioux City Chamber of Commerce.

Mr. DAVIS. Without objection, your full statement will be made a part of the record at this point.

Mr. HOEVEN. I appreciate that; and may I present Mr. Gleeson.

(The prepared statement of Mr. Hoeven and the letter referred to are as follows:)

STATEMENT OF HON. CHARLES B. HOEVEN, EIGHTH DISTRICT OF IOWA

Mr. Chairman and gentlemen of the subcommittee, may I say that I sincerely appreciate the opportunity of appearing before your subcommittee this morning. It is my privilege to represent the Eighth Congressional District of Iowa in the Congress and, as you may know, the entire Floyd River Basin, which is reported in House Document 417, 84th Congress, is located within my District. Therefore, I have had a keen interest in the Army engineers' survey of the Floyd River and tributaries, as well as a satisfactory solution to the flood-control problems which have confronted my constituents for many years.

Flood control has been a perennial problem in the Floyd River Basin since 1892, and since that time there have been periodic disasters of considerable magnitude. Shortly after coming to Congress, I introduced a resolution which was adopted by the Committee on Flood Control of the House of Representatives on May 29, 1944, calling for a review of the situation existing in the Floyd River Basin, with a view to determining if improvement in the interest of flood control would be feasible. Due to the fact that the United States was at war at that time, and because of the subsequent readjustment to a peace-time economy, it was not possible to begin active investigation of the Floyd River survey until June 1948. The investigation proceeded at a normal rate until it became necessary to suspend operations during the fiscal year 1950 because of inadequate funds. In view of the long period which has elapsed since the inauguration of this survey, I am immensely pleased that the report has been completed and that congressional consideration is now possible.

Flood disasters have been very much in the news during the past several years. We in northwest Iowa can sympathize with the people of the east and west coasts because we know from experience what an uncontrolled inundation of floodwaters can do to the life of a community. On June 8, 1953, the entire Floyd River Basin in northwest Iowa experienced the most disastrous flood in the basin's history. From the standpoint of both loss of human life and damage to property, this flood also ranks among the most disastrous floods of record for streams of its size in the entire Missouri River Basin. The Corps of Engineers estimated the damage at approximately $25,603,000. No one will, of course, attempt to estimate the value of the lives lost during this disaster, a total of 14 individuals perishing in the Sioux City, Iowa, area. These victims were primarily elderly people who had lived in the flood area for many years but were unable to flee their homes fast enough to escape the advancing floodwaters. In the three major floods of the past 61 years in Sioux City, 45 people have been drowned. In the flood of 1892, 25 people lost their lives; 6 other lives were lost in 1926.

The damage caused by the flood of June 1953 greatly exceeded throughout the basin the damages caused by any previous flood. At Sioux City alone, a total loss of $23,185,000 was approximately 20 times the damage reported for the floods of 1892 and 1926, despite the fact that the channel had been improved since those earlier floods. Approximately 90 percent of all the damage in the Floyd Basin from the flood of 1953 occurred in the city of Sioux City. Damage was extensive and severe because of the flash character of the flood, the impracticability of adequate warning of the impending disaster, and the unprecedented depths and velocities of the floodwaters within the city. In the city alone, 4,600 persons were evacuated from their homes and many others were evacuated from their places of business.

The Floyd River Basin is predominantly an agricultural area. Sioux City, however, which suffered greatest damage in the recent flood, is the second largest city in the State and the largest city in western Iowa. It is a major industrial, commercial, and transportation center. A substantial port of the city's industrial and commercial developments and nearly all of its railroad-yard facilities are concentrated within the flood plain of the Floyd River. Included are the Sioux City Stock Yards, major packing plants, major food and equipment manufacturing plants, large wholesale and distributing concerns, and a variety of lesser manufacturing, distribution, and service industries. Business and industrial flood damages are estimated to have been in the neighborhood of over $16 million.

Keen interest in adequate flood control in the Floyd Basin has been displayed by all individuals in the area concerned. In 1953, and again in 1954, I called public meetings at Le Mars, Iowa, for the purpose of discussing methods of flood control and ascertaining whether or not public support would be assured. Representatives of the Army engineers, Soil Conservation Service, cities and municipalities, and area farmers were encouraged to present their problems as well as their suggestions for solutions of the flood situation. At our meeting in 1954, representatives of the Army engineers presented their plans for flood control, and unanimous agreement was voted.

My purpose in appearing before the subcommittee today is to urge prompt approval of the Floyd River project so that authorization may be granted by the Congress and funds appropriated for planning during the coming fiscal year. It is unnecessary for me to go into further detail since I am sure all members of the subcommittee are familiar with the contents of the survey and all its implications. I cannot express too strongly, however, the need for adequate flood protection for the city of Sioux City and surrounding area.

Notwithstanding the potential flood threat to the lives and properties of the people of this area, the possibility of the recurrence of a disaster similar to that of 1953 seriously handicaps the economic expansion of Sioux City. Industrial building sites are limited in the metropolitan area, and most of them are located in the Floyd River Basin of Sioux City, which is the area which suffers the greatest flood damage. This threat is keeping industry from moving into Sioux City, and not until adequate flood-protection measures are taken can the economic and commercial expansion of Sioux City be assured.

The proposal you are considering today has the endorsement of the city of Sioux City as well as its chamber of commerce, and its civic organizations. It also has the approval of the Floyd Valley Watershed Association which is interested in control measures in the upper valley.

May I again say that the need for flood protection on the Floyd River at Sioux City, Iowa, is urged. My constituents in the area want it and approve of it. It is my hope that your subcommittee and the Committee on Public Works will give the proposal your speedy approval.

The plan for flood control on the Floyd River as set forth in House Document 417 also has the endorsement of the Mississippi Valley Association. At the request of Mr. James R. Smith, manager of the Missouri River division of the Mississippi Valley Association, I submit herewith the association's statement in support of this project for the committee's record.

Again let me thank you for the privilege of appearing here this morning. I would now like to introduce a constituent from Sioux City, Iowa, who is here this morning to represent local interests. He is a member of the Water Ways Committee of the Sioux City Chamber of Commerce, and it is my privilege to present to you at this time Mr. Robert E. Gleeson.

STATEMENT OF THE MISSISSIPPI VALLEY ASSOCIATION RE FLOYD RIVER FLOOD CONTROL, SIOUX CITY, IOWA

Mr. Chairman and gentlemen of the committee, the Mississippi Valley Association wishes to lend its very vigorous support to the plan for flood control on the Floyd River to protect Sioux City, Iowa, and its environs. Adequate flood-protection measures on the Floyd River have been an important part of the platform of the Mississippi Valley Association for many years.

We particularly wish to call to the committee's attention, the fact that in many respects the 1953 flood on the Floyd did far greater damage in Sioux City than did the historic flood on the Missouri River in 1952. We have witnessed the distress of residents and business firms who, twice in 13 months, were practically wiped out.

In fighting for a sound plan for flood control on the Floyd River, Sioux City is virtually fighting for its economic life. It is the only major city on the Missouri River where complete flood protection is not even authorized by Congress—much less under construction as it is in most other communities of similar size and importance to the economy of the Midwest.

Not only do thousands of Sioux City residents live under the constant threat of floods generated in the upper Floyd Basin but the growth of Sioux City's commerce and industry has been severely hampered because most of its primary industrial land lies directly in the path of every Floyd River flood. Some industry has already left the city because of the danger, notably meatpacking and farm machinery companies.

Of all the urgent situations in the entire Missouri Basin, the threat of the Floyd River to Sioux City, Iowa, is the most serious.

For these reasons, the Mississippi Valley Association, comprising several thousand business firms and farmers in the 23-State Mississippi Basin, respectfully requests that this Congress give quick approval and authorization to the submitted plan for flood control on the Floyd River so that early construction can forestall a repetition of the disastrous flood of 1953.

Respectfully submitted.

JAMES R. SMITH, *Manager, Missouri River Division.*

Mr. DAVIS. Mr. Gleeson, would you mind summarizing your statement in further support of that which has been presented by the representative of the Corps of Engineers and by your very fine Congressman, our colleague, Mr. Hoeven?

STATEMENT OF ROBERT E. GLEESON, CHAIRMAN, FLOYD RIVER FLOOD CONTROL COMMITTEE, SIOUX CITY CHAMBER OF COMMERCE, SIOUX CITY, IOWA

Mr. GLEESON. Thank you, Mr. Davis. I did not intend to read this statement. I know you have had a lot of testimony this morning.

I would like simply to put in the record a resolution by the City Council of Sioux City, endorsing the Army engineers' flood-control plan unanimously, and also the comments of the chamber of commerce.

As Mr. Hoeven has remarked, there is no opposition to this plan at all. Everyone is unanimous on its need, and I would like to stress we think the benefit-cost ratio of 1.74 is extremely advantageous.

I would also like to request that if possible consideration be given so that we can get an appropriation for an engineering study this year. We feel there will be 9 to 12 months required for engineering, and if we can get it started this year it will be of great benefit to us.

Thank you very much.

Mr. DAVIS. That involves another committee, where we have some difficulty ourselves.

Mr. GLEESON. I appreciate that.

Mr. ROGERS. I want to say I am sort of favorably impressed with the presentation here this morning by the colonel and by our very able colleague. I notice here that their loss in this city was over $23 million in 1953.

Mr. GLEESON. That is right.

Mr. ROGERS. I can certainly lend a very sympathetic ear to it, knowing the flood-control problems of Florida.

Mr. GLEESON. Thank you very much.

Mr. DAVIS. Thank you.

Without objection, the resolution referred to and also the prepared statement of Mr. Gleeson will be made a part of the record at this point.

(The resolution referred to and the prepared statement of Mr. Gleeson are as follows:)

RESOLUTION No. R-2077

A resolution endorsing the proposed plan of improvement for flood control on the Floyd River at Sioux City, Iowa, and expressing an opinion regarding the willingness and ability of local interests to cooperate in the construction of the planned improvements, and rescinding resolution No. R-1791

Whereas on November 29, 1954, the Council of the City of Sioux City, Iowa, adopted resolution No. R-1791 endorsing certain plans of improvements for flood control; and

Whereas said resolution No. R-1791 as adopted needs and requires certain minor corrections and points of clarification and should be rescinded; and

Whereas the district engineer, Omaha district, Corps of Engineers, has been directed to investigate and report on the advisability of undertaking improvements for flood control on the Floyd River and its tributaries at this time; and

Whereas he has formulated a plan of improvement for the Floyd River through and in the vicinity of Sioux City, Iowa, which has been presented to local interests at a public hearing and is being coordinated with the plans of State and local agencies, which consists of channel improvements together with a system of levees in and above Sioux City; and

Whereas the city council recognized that the plan as formulated or as may be amended in the future will create substantial benefits in and adjacent to Sioux City, Iowa, through alleviation of flooding and flood damages; and

Whereas Federal legislation requires that in the case of local channel improvements or levee projects no money shall be expended on construction until States, political subdivisions thereof, or other responsible local agencies have given assurances satisfactory to the Secretary of the Army that they will (*a*) provide without cost to the United States all lands, easements, and rights-of-way necessary for the construction of the project; (*b*) hold and save the United States free from damages due to the construction of the project; and (*c*) maintain and operate the project after completion in accordance with regulations prescribed by the Army; and

Whereas highway relocations, the replacement, repair, or alteration of highway bridges, and similar works are inherent in the provision of clear rights-of-way and must be accomplished without cost to the United States; and

Whereas the district engineer has requested the opinion of the city council of Sioux City, Iowa, as to the desirability of the plan of improvement which he has formulated, subject to such changes as future conditions may warrant and as to the willingness and ability of local interests to provide the necessary local cooperation in the construction of the planned improvements; and

Whereas the city of Sioux City, Iowa, is a municipal corporation organized and existing under the laws of the State of Iowa, as are set forth under chapter 363C of the 1954 Code of Iowa, and as such public body has the authority to provide necessary rights-of-way and otherwise comply with the requirements enacted by Congress as preliminary to construction of the project for local flood control of the Floyd River; and

Whereas the city council is informed on the attitude of local interests to the extent that it feels competent to express opinions thereon; now, therefore, be it

Resolved by the Mayor and City Council of Sioux City, Iowa, That it is the opinion of said mayor and said council that local interests favor and endorse the plan of improvement as presented to them, subject to such changes therein as may be warranted by future changes in the local situation, or as may be found desirable as the result of further detailed engineering studies, and should the plan be recommended by the Corps of Engineers and adopted by the Congress of the United States, local interests, prior to initiation of construction, will be willing and will be financially able to—

(a) Furnish without cost to the United States all lands, easements, and rights-of-way necessary for the improvement;

(b) Hold and save the United States free from damages due to the construction work;

(c) Maintain and operate the improvement in accordance with regulations prescribed by the Secretary of the Army;

and be it further

Resolved, That resolution No. R–1791 be, and the same is hereby rescinded; and be it further

Resolved, That two copies of this resolution be furnished to the office of the district engineer, Corps of Engineers, Omaha district, Omaha, Nebr., as evidence of the desire of the city of Sioux City, Iowa, to cooperate and obtain the construction of the proposed project for flood protection in the Floyd River.

GEO. W. YOUNG, *Mayor.*

Passed: February 28, 1955.
Approved: February 28, 1955.
Attest:
[SEAL]

C. A. NORRBOM, *City Clerk.*

STATEMENT OF MR. ROBERT E. GLEESON, CHAIRMAN, FLOYD RIVER FLOOD CONTROL COMMITTEE, SIOUX CITY CHAMBER OF COMMERCE

Speaking for the 90,000 citizens of Sioux City, Iowa, I wish to thank the committee for the opportunity you have given me to appear today so I may present a statement urging the approval of the Floyd River flood control project.

The report, as compiled by the Omaha district of the Corps of Engineers covering the Floyd River, its past history and its present status is known to all of you so I do not wish to duplicate any of its information but I do want to convey to you the sentiments of the people of Sioux City who are looking to you today for positive and affirmative action on this report.

The Floyd River, although not navigable, does run through the heart of our industrial and commercial area with the result that our last flood, of June 8, 1953, caused damage of $25 million and the loss of 14 lives. The recorded history of

the flooding on this river dates back to 1892 and represents an annual average loss of $1 million. Obviously this condition has seriously impeded the growth of the finest section of industrial land area in our community.

In addition to the Floyd Valley's containing our extensive stockyards area and meat packing plants it also contains the great majority of our industrial, commercial, and wholesaling firms as well as the heart of our railroad yards with their vital north-south and east-west lines. It can truly be said that almost all of our 90,000 people are dependent to a great extent on the fortunes of the business firms in the valley.

We in Sioux City are cognizant of the tremendous problems brought to your committee by flood victims from every section of the country. We realize that you cannot, within budgetary limits, lend approval to each project as presented but we do wish to emphasize that a study of the Floyd River was first approved by the Committee on Flood Control of the House of Representatives on March 29, 1944, but unfortunately lack of funds delayed the active prosecution of the investigation.

The subsequent flood of 1953 again brought the matter to prominent attention with the resultant action by the Corps of Engineers and the completion of its report now under consideration. Please bear in mind that more than 12 years have elapsed since a House committee first acted on the Floyd River problem and today we still have nothing to protect our business places from rampaging waters but the report you have before you.

The Floyd River Vally contains 1,000 acres of potentially excellent industrial land which is waiting only for flood control before it can realize its maximum potential. The business firms already in the valley are delaying expansion plans due to the ever-present flood threat. In short, Sioux City, from every standpoint, must have the Floyd River controlled and earnestly solicits your support.

The cost benefit ratio as developed by the Corps of Engineers for this project is 1.79 to 1, which demonstrates from a practical dollars and cents standpoint the value of this project.

Your favorable action will bring our dream of a flood free community closer to reality.

Thank you for your attenion this morning and for your consideration of our problem.

Wolf River, Tenn.

Mr. Davis. I do not see any other colleagues at the moment. I am going to call up the Wolf River in Tennessee, which is a very important small project.

This project has been under very thorough discussion since 1949. The district engineer gave study to it, and the division engineer, and the president of the Mississippi River Commission. It has had a favorable report from the review board on April 25 last.

Mr. Weber is going to present this. If there be no objection, this originates in my district and it is only a little $2 million project, but I want to show you on this project I think the Corps of Engineers, the Mississippi River Commission, and everyone else leaned over backward because not only do we make a very substantial contribution, but on a project costing a little over $2 million we put up a cash contribution of $439,000.

Mr. Weber is one of our ablest representatives and I cannot read a map, so you will have to discuss my own project for me, Mr. Weber.

STATEMENT OF EUGENE W. WEBER, CORPS OF ENGINEERS—Resumed

Mr. Weber. Wolf River rises in Mississippi and flows 117 miles through southwestern Tennessee to join the Mississippi at Memphis.

Mr. Smith. It smells awful bad there too.

Mr. WEBER. The existing works the Federal Government in the vicinity that affect the project and plans being considered include the navigation project authorized in 1935, which you can best see on this insert on the map. It calls for a channel 250 to 200 feet wide and 9 feet in depth for about 3.7 miles, and thence 125 feet wide and 9 feet in depth to mile 5.5 on the Wolf River.

That project is about 50 percent complete, the work having been done only halfway up along the Wolf River at a cost of $600,000 approximately for new work, and about $1,300,000 for maintenance.

The flood-control work by the Federal Government in the vicinity consists of a project for the protection of Memphis and vicinity through dikes and walls and drainage works along about 9 miles of the Wolf River and Nonconnah Creek, which shows on this map down here. That project is about 77 percent completed.

I should mention in addition there has been work on Sand Creek and Mary's Creek by the Soil Conservation Service, which has two pilot watershed treatment programs in the basin.

Mr. DAVIS. I would like to tell Mr. Schwengel, who is interested in soil conservation, that that was a very worthy project. It was a pilot project and they set out millions of seedlings and are doing a good job of conserving the land, and, of course, are furnishing protection against floods as well.

Mr. WEBER. In addition, local interests have done some work on Gray's Creek and on the Wolf River itself, in cleaning out and straightening channels.

The problem which exists from a flood standpoint in this basin is that the channels are inadequate and there is flooding annually. In 2 out of 3 years there is flooding during the crop season. You can perhaps see the light blue outline which shows the amount of flooded area, which amounts to about 54,000 acres, of which over 18,000 acres are actual crop lands.

The losses in one of the biggest recent floods were about $300,000 in 1949, and the average annual flood damages along the Wolf River are about $134,000 annually.

The proposed solution to the flood problem is a plan to realine and enlarge the channel of Wolf River from Gray's Creek at about mile 38 down to mile 3.5. Looking again at the insert in the vicinity of Memphis, Wolf River would be closed off by a 2,100-foot embankment at mile 3.2, and a new outlet for Wolf River would be cut through Mud Island to the Loosahatchie chute. This cutoff is about 0.6 of a mile across and there would be 0.7 of a mile of improved channel to a new outlet into the Mississippi River. That would, of course, close off the lower 3½ miles of the Wolf River, where there is an existing navigation project, but would not disturb navigation in that section.

In addition, there would be about 5 miles of realinement and cleaning out of Fletcher Creek, which is a tributary in the lower section of the basin.

The total cost of the project would be $3,027,000 based on the latest estimate. Of this the Federal Government's share would be $1,932,000, and the local share $1,095,000, consisting of provision of lands, easements and rights-of-way, and alterations to bridges; construction of a sewer interceptor along this section of the lower Wolf River at Memphis which will have an incidental benefit of eliminating ob-

jectionable odors from the disposal of sewage in these channels; and, the local interests would also contribute approximately 19 percent of the cost of other work other than that which I have mentioned.

Mr. BALDWIN. Could I ask a question?

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. Do you have assurance that those funds will be able to be raised locally?

Mr. WEBER. Yes, sir. The City of Memphis Commission and the Shelby County Commission have each passed resolutions agreeing to the conditions of local cooperation which I have outlined.

There is one other condition of local participation which is significant, and that is to make the project effective the local interest must do at least 50 percent of the local drainage work which the Soil Conservation Service has indicated is necessary for full utilization of the lands for which this project would provide the major drainage. The total plan on which they would be required to complete at least 50 percent amounts to about $227,000 worth of onfarm and interfarm drainage.

The benefits of the entire plan are estimated at $145,000 annually, including the elimination of damage to the extent of about $43,000 annually; reducing flooding in crop season from a frequency of 2 in 3 years to about once in 4 years.

There is also the elimination of some dredging maintenance in the navigation project due to the requirement that local interests also must agree to the abandonment of the upper half of the navigation project, since it will no longer be practicable to use it for navigation.

The other benefits are improved crop production, which result from the improvement in the Wolf River. There is a total of $145,000 in benefits annually compared with costs of $121,600, or a ratio of 1.2.

As I mentioned, Mr. Chairman, the Memphis City Commission and the Shelby County Commission have expressed themselves favorably and agreed to the conditions of cooperation.

Mr. DAVIS. This is a part of a long-range program of improvement. This interceptor sewer is down at this end. Of course, if I may in my simple way explain it, the Wolf River comes down to a point and then flows on by the city of Memphis proper. This project, of course, would close that at this point and the upper part of Wolf River. The navigation then, of course, would be out. This would provide an entrance from the Wolf River into the Loosahatchie, where he is pointing out that chute, and would cross an island we have in front of the city of Memphis and give a direct route for the water to go into the mainstream of the Mississippi River.

Around the city proper there would be some 5 or 6 million dollars worth of interceptor sewer. Some years ago at great cost an interceptor sewer was built, but it has not been sufficient to meet the demands or the needs of the city as it has grown tremendously. It requires quite an expenditure of 5 or 6 million dollars for interceptor sewers around there.

Now, as I said, and as Mr. Weber pointed out very finely, this will permit the closure, and there will be no navigation from that point up, but it will permit the Wolf River to flow into the Loosahatchie chute there for a short distance, and then go directly into the Mississippi River. It will be of untold benefit to the city of Memphis be-

cause it will remove the odor, which is No. 1, and then it will also remove the threat of flood which has been described. It will reduce the threat from flood from 2 in 3 years to 1 in 4 years, which involves a great deal of farmlands up and down the river, which at the moment are flooded in some reaches every year.

If there are any questions, I would like to undertake to answer them, because I have been living with this for a good, long while. I repeat that in addition to the usual relocation of bridges and roads that are necessary, and so on, and the rights-of-way and easements, and in addition to this $439,000 cash contribution, they will build this interceptor sewer and will also do about 50 percent of the agricultural work in connection with the overall program.

I really think this is one of the models as far as this situation is concerned. The district engineer and the division engineer and the Mississippi River Commission gave a very thorough report on this and it had the endorsement and approval in the month of April of the Board of Engineers for Rivers and Harbors.

Are there any questions from any of my colleagues?

Mr. BECKER. No. You have done a very good job of selling it, Mr. Chairman.

Mr. DAVIS. Thank you very much, Mr. Weber, and all of you.

(Whereupon, the committee recessed temporarily.)

BRUSH CREEK, W. VA.

Mr. DAVIS. The committee will resume its session. We will take up Brush Creek, W. Va., Senate Document 122, and we will ask Colonel Penney if he will make a statement on that matter.

STATEMENT OF COL. HOWARD W. PENNEY, CORPS OF ENGINEERS, UNITED STATES ARMY—Resumed

Colonel PENNEY. Mr. Chairman and gentlemen of the committee, the report on Brush Creek at Princeton, W. Va., was authorized by resolution of the Senate Committee on Public Works dated June 1, 1948. The report is to be printed as Senate Document 122. It was transmitted to the Congress by the Secretary of the Army on May 15, 1956.

Brush Creek flows 19 miles northeast to join the Bluestone River in southern West Virginia. It is a tributary in the Kanawha River Basin. Princeton lies approximately in the center of the Brush Creek Basin at the confluence of two forks, Glady Fork and Christian Fork.

The population of Princeton was about 8,000 in 1950. There is no existing Federal flood-control project there. The principal enterprise in the area of Princeton is the repair shops of the Virginian Railway. Also they have various wholesale food establishments and building-supply establishments, as well as about 20 small industries.

Relatively moderate flooding occurs very often in Princeton, as a matter of fact, three or more times in a year. The highest known flood is believed to be that of 1901 but the flood of recent record was 1924. Other large floods occurred in 1948 and 1955. Losses from a recurrence of the flood of 1924 would be about $143,000. The average annual damages are estimated at about $82,000, consisting primarily of damage to industrial, commercial, and residential areas along the

southern portion of Princeton, as well as the isolation of the railway repair shops and the interruption of railroad and highway traffic.

Channel improvement has been found to be the most practicable means of giving substantial flood protection to Princeton. The proposed plan provides for channel improvement of Brush Creek for about 3 miles, including the straightening and the enlarging and clearing of the channel including also a cutoff next to the Virginian Railway shops and certain improvements on Glady Fork and Christian Fork. This would provide protection against a flood of 20 percent higher than the flood of record.

The estimated cost to the Federal Government at January 1956 prices is $917,000. The estimated non-Federal cost is $360,500. Local interests would be required to furnish the lands and rights of way; to maintain the project after it is completed, and to hold and save the United States Government free from damages.

Mr. JONES. Is there a cash contribution?

Colonel PENNEY. Yes, sir.

Mr. JONES. How much?

Colonel PENNEY. The cash contributions of $28,500 is included in the $360,500. That is the present estimate of it. It is 3 percent of the cost of construction for which the United States is responsible.

In addition, local interests would be required to make modifications that are required to the highways and highway bridge, sewer and utility alterations, and bear the cost of railroad alterations other than the railroad bridges. They would be required also to take action to restrict residential construction in this flood-plain area so that the first floors of any residences would be above the elevation that would be flooded by a very extraordinary flood.

The benefit-cost ratio for this project is 1.8 to 1. The comments of the State of West Virginia and the Bureau of the Budget are favorable to the report.

That is all I have to present, Mr. Chairman.

Mr. DAVIS. Are there any questions on this? We have a formal statement by our colleague, Mrs. Kee of West Virginia. Without objection it will be made a part of the record at this point.

(The prepared statement of Mrs. Kee is as follows:)

STATEMENT OF HON. ELIZABETH KEE, FIFTH WEST VIRGINIA CONGRESSIONAL DISTRICT.

Mr. Chairman, and other distinguished members of the subcommittee, thank you for inviting me to appear before you in behalf of the Brush Creek flood-control project at Princeton, W. Va. I am very much pleased indeed that this project has been referred to you for consideration, and I am most hopeful that it will be possible for you to approve it and to include it in the rivers and harbors and flood control omnibus bill now in preparation.

Before his death in 1951, my husband, the late Hon. John Kee, spent much time and thought on the Brush Creek flood-control project, which has been under active consideration by the United States Army Corps of Engineers for the past 8 years, and I have also worked on it continually since my own election to Congress in 1951. The first public hearing conducted by the Corps of Engineers was held in October 1948. The project is sponsored by he city of Princeton and has the support of the Mercer County court, agricultural organizations, Mercer County Board of Education, and all business and civic organizations in that area. The need for the project is so well recognized that no opposition has been voiced at any of the hearings, or at any stage of the study.

The floods which periodically ravage the community in and around Princeton are a matter of the gravest concern to all of our people in that vicinity, and, as

a resident of the county of Mercer, in which Princeton lies, I am only too well aware of the damage and suffering that have been caused by these floods for many years.

She last flood to occur in this vicinity was 60 days ago, on April 4, 1956, when roads and schools were closed and families were required to leave their homes. In the spring of 1955, more than 100 families were evacuated 3 times within a 30-day period. These experiences are annual occurrences. In addition to the inconvenience caused to the citizens of Princeton, and the costs of the damages, which average about $82,000 per year, there is a serious health hazard created during flood times by water pressure forcing open manholes and thus distributing sewage and other deleterious matter over wide areas.

Mr. Chairman, as you undoubtedly know, there has been and still is, a serious unemployment problem existing in southern West Virginia because of the recent depression in the coal industry, and the fact that, while the mines are now producing coal, mechanization has displaced a very large number of manpower. The coal industry makes up the greater part of the economic life of my congressional district. Within the past few years business and industrial leaders and private citizens of the Princeton-Bluefield area have formed an area development corporation financed through public contributions designed to attract new industry to the area in order to absorb the surplus labor supply and put our unemployed coal miners to work. This corporation has been successful in interesting a number of additional industries in locating in my home county of Mercer. However, as far as Princeton is concerned, there is at present no available land for construction of facilities for these new industries. Land lying along Brush Creek, which would be suitable for such development, is periodically inundated. Brush Creek, with its floods and constant threats of floods, has in this way retarded the growth of Princeton, which is one of the most ideally situated communities in southern West Virginia for industrial development.

Completion of the Brush Creek flood-control project would result in the rehabilitation of 1,000 or more acres of low bottom land, ideally situated for industrial, residential and agricultural use. This land is located within the corporate limits of the city of Princeton and immediately adjacent thereto. It is now waste land and cannot be developed because of the threat and actual existence of annual floods. Princeton has a large labor surplus. It is served by the Virginian Railway and the West Virginia Turnpike, and it is at the crossroads of Federal and State highways for north-south and east-west highway travel. We feel that with the threat of floods removed, and the putting back into productivity of a large area of land, Princeton will be able to attract and welcome the industries which it so badly needs. The future of the city depends on this project.

The city has done everything within its power to alleviate flood conditions, but the flood-control project is entirely too large a job to be undertaken by the city of Princeton alone. Federal assistance is required, and the justification and feasibility of the project have been established by the United States Army Corps of Engineers, and the project has been recommended by the Secretary of the Army, the Bureau of the Budget, the State of West Virginia, and by all local interests in the affected area. In fact, local interests are enthusiastically cooperating in plans for the project and have agreed to bear a portion of the cost amounting to more than $360,000.

The need for the project is so generally recognized that all public utilities in the community, with the possible exception of the Virginian Railway Co., have given the city written assurance that they will individually bear the cost of whatever changes might be necessary in their lines and equipment. The Virginian Railway Co. has been cooperative with the Corps of Engineers, and we are satisfied from past experience that the Virginian, like the other utilities, will bear its individual costs as a local contribution.

It is particularly noteworthy that no individual or corporation will be the chief beneficiary of this project. It will be beneficial to all of the citizens of Princeton, and to those of a large surrounding area, and thus indirectly to all of West Virginia and the Nation.

Mr. Chairman, I cannot too strongly urge you and the other members of your committee to give your approval to this project, which will first of all mean so much to the people of my congressional district. Thank you for your kind consideration.

Mr. DAVIS. Now we have Mr. Johnston, who was here all day yesterday, I believe, waiting for this project to be called up. We will be glad to hear from you now, Mr. Johnston.

STATEMENT OF JAMES KEE, ADMINISTRATIVE ASSISTANT TO HON. ELIZABETH KEE, MEMBER OF CONGRESS FROM THE STATE OF WEST VIRGINIA

Mr. KEE. May I interrupt to make one statement at this point, Mr. Chairman. Mr. Johnston is a very distinguished and illustrious citizen from down home and served in our State senate and was honored by his colleagues to be the president of the State senate. Mr. Johnston is absolutely typical of our local residents. He is very modest. He drove all night with the city manager to attend your session today and I wanted to bring that out.

Mr. DAVIS. Thank you. We are very glad to have you here representing Mrs. Kee.

Mr. KEE. Thank you very much, Mr. Chairman.

STATEMENT OF J. BROUGHTON JOHNSTON, REPRESENTING THE CITY OF PRINCETON, W. VA.

Mr. JOHNSTON. Mr. Chairman and members of the committee, the city of Princeton worked on this project continuously since 1948. It is the sponsoring agency. It received the complete cooperation of all local interests. There has been no objection offered from any source, local or otherwise. That is true since its inception.

All the utilities of our area that are cooperating have agreed to make the necessary changes they may be required to make by reason of the project.

It was mentioned a moment ago the city would be required to adopt a zoning ordinance. That ordinance has already been adopted by the city and also by the county court. The project is recognized as one of the most important projects of our area. It means the future of our city. The project will rehabilitate land for industrial, agricultural and residential purposes.

This area is flooded each year, which restricts the construction of any new projects of any sort, or the development of the area. I have a picture that was taken of a recent flood. If the committee desires I will be happy to leave the pictures with them. It will give them a graphic view of the city and the flood conditions as they exist. I may say of picture No. 1, the building to the left is the Maidenform Brassiere Co. employing 725 girls. You can see that industry has gone right to the flood wall. They cannot expand further.

It may be of interest too that on picture No. 12 it shows there a roadside grill and there is a Federal highway immediately in front of the grill, under water.

Also for the record there is a recommendation of the county court of Mercer County, and the Mercer County School in which they urge the adoption or authorization of this project, stating that they operate 13 school buses twice daily across and through this valley carrying approximately 1,400 children. Time and again during the fall, winter and spring months they run the bus through water up to the axles, and in many instances it is necessary to close the school area and send the children home.

Also a statement from the Mercer County Health Department urging the project from the standpoint of health, stating that the situa-

tion is dangerous and will create the possibility of typhoid fever and dysentery.

Also a letter from the chamber of commerce of the city of Princeton.

Also a letter from the tax commissioner of the State of West Virginia in which they show the city's ability to meet its local responsibility, and a resolution adopted by the city of Princeton on June 6, Monday, reading:

Now, therefore, be it

Resolved, That the common council of the city of Princeton reaffirm its position as sponsoring agency of the Brush Creek flood-control project, assure the authorities of the Federal Government, including the Public Works Committee of Congress of its willingness to assume its local responsibility "as required by regulation and statute and of its ability to meet said requirements by bond issue, or otherwise.

I might say for the benefit of the committee that we hope to be able, through public contribution and subscription to meet our entire local cost without the necessity of bond issues.

Are there any questions?

Mr. DAVIS. Thank you so very much for the sacrifice you made in coming here and driving all night.

Mr. SCUDDER. What is the percentage of cash of the local contribution?

Mr. JOHNSTON. 3 percent. The local contribution was stated as $360,500 and the cash is $28,500. For the record I may state further that the city this year is budgeting $10,000 within their limits for the cost, and I would like also to have it noted on the record the presence of Mr. A. R. England, city manager and chief executive officer of the city of Princeton.

Mr. DAVIS. All right. The record will show he is present and we are glad to have you here. If there are no questions that will conclude the hearing on this project at this time.

Mr. KEE. Before we leave can I say two things?

Mr. DAVIS. Yes, sir.

Mr. KEE. The first thing is we are certainly indebted to you and the distinguished members of your committee for this opportunity to appear today. We have wonderful folks down home, Mr. Chairman.

The second thing is mother asked me to mention to you, and I am happy to join in the remarks which your distinguished colleagues made earlier today of your very fine and outstanding leadership; and, finally, I hope we are on extremely solid ground on our presentation.

Thank you very much.

Mr. DAVIS. Thank you very much. You made a fine presentation and presented it well. Without objection the documents presented by Mr. Johnston will be made a part of the record at this point.

(The documents referred to are as follows:)

Whereas the city of Princeton, a municipal corporation, Mercer County, W. Va., as sponsoring agency for Brush Creek flood-control project has complied with all Federal and State laws, regulations and requirements, including those of Engineering Corps of the United States Army and has diligently pursued a course of action designed to relieve said city and surrounding area from annual floods and has agreed with authorities of the United States Government to bear its required statutory cost and requirements of said project; and

Whereas said project is before the Public Works Committee of the House of Representatives with public hearing scheduled June 8, 1956: Now, therefore, be it

Resolved, That the common council of the city of Princeton reaffirm its position as sponsoring agency of the Brush Creek flood-control project, assure the

authorities of the Federal Government, including the Public Works Committee of Congress of its willingness to assume its local responsibility as required by regulation and statute and of its ability to meet said requirements by bond issue, or otherwise.

I, C. C. McGuire, city clerk, certify that at a regular meeting of the council of the city of Princeton, Mercer County, W. Va., held in the council chambers of the municipal building on June 4, 1956 at 7 p. m., the above resolution was unanimously approved, and adopted, and all members of the council being present.

[SEAL] C. C. MCGUIRE, *City Clerk.*

Dated this 6th day of June 1956.

COUNTY COURT OF MERCER COUNTY,
Princeton, W. Va., June 5, 1956.

Hon. CHARLES A. BUCKLEY,
Chairman, Public Works Committee,
House of Representatives, Washington, D. C.

DEAR MR. CHAIRMAN: Mercer County court, realizing the importance of Brush Creek flood-control project to the city of Princeton, W. Va., and vicinity, earnestly solicits the support of your committee in authorizing the project at this session of Congress.

The county court has worked in close cooperation with the city of Princeton and has adopted zoning ordinances requested by the Corps of Engineers, United States Army. In our opinion this is the most important project in our county.

Annual floods create considerable damage, affect the health of our citizens, interrupt schools, and prevent development of a large area important to the agricultural, industrial, and residential future of the area. From past experience we are satisfied that each year this project is delayed our people will be confronted with annual floods, damage will continue and future development will be impossible.

Very truly yours,

FRED THOMASON.

MERCER COUNTY SCHOOLS,
Princeton, W. Va., May 29, 1956.

Re Brush Creek flood-control project, Princeton, W. Va.

Hon. CHARLES A. BUCKLEY,
Member of Congress,
Chairman, Public Works Committee,
House of Representatives, Washington, D. C.

DEAR SIR: Kindly allow us to urge your support in the authorization and appropriation of funds to complete the Brush Creek flood-control project as soon as possible.

As you no doubt know, this project has been under consideration for many years and during those years the situation in the Brush Creek Valley has progressively become worse. Each spring and fall the flood conditions in the area become more acute and the damage to farms and crops considerably larger.

The public-school system in this county operates 13 school buses twice daily across and through the Brush Creek Valley, carrying approximately 1,400 children. Time and time again during the fall, winter, and spring months, we have had to run our buses through water up to the axles on the highways and on many occasions have been compelled to release the bus children during the schoolday and send them home before the water has risen over the highways.

The project in question is certainly one of the most needed ones in this area and action on it by Congress is most earnestly requested by this writer as representative of the school system in the area.

Respectfully,

W. R. COOKE, *Superintendent.*

MERCER COUNTY HEALTH DEPARTMENT,
Bluefield, W. Va., June 6, 1956.

Hon. CHARLES A. BUCKLEY,
Chairman, Public Works Committee,
House of Representatives, Washington, D. C.

DEAR SIR: It has been brought to my attention that your committee is considering a flood-control project in the Brush Creek drainage area of Mercer County, W. Va.

May I take this opportunity to discuss a few points concerning the health of the people in this area?

We, of the Mercer County Health Department, have been concerned for some time with the potential problem in this area in regard to the danger of floods. Because of the densely-populated area surrounding the edge of this Brush Creek drainage area and also poor sanitary conditions as a result of improper sewage-disposal system, floods in this area would bring the potential threat of the sudden spread of several of the dangerous communicable diseases such as typhoid fever and dysentery. Several of the people in this area have individual or private water supplies which could easily become contaminated as a result of flooding conditions. If flood-control measures were initiated in this area, it would prevent this potential threat of the spread of these dangerous communicable diseases and at the same time would aid in relieving several low, marshy areas, and give the people in those areas an opportunity to establish proper sewage disposal systems.

In the event your committee should take favorable action in this project, it would be greatly appreciated by this department and I am sure would be a great aid and benefit in promoting better health to the citizens of Mercer County, W. Va.

Sincerely,

N. ALLEN DYER, M. D., *Director.*

PRINCETON CHAMBER OF COMMERCE,
Princeton, W. Va., June 5, 1956.

Mr. CHARLES A. BUCKLEY,
Chairman, Public Works Committee,
House of Representatives, Washington, D. C.

DEAR SIR: The Princeton Chamber of Commerce has been interested in the Brush Creek flood-control project at Princeton, W. Va., since the proposal was first presented in 1948, and its special committees have cooperated to the fullest extent with the United States Army engineers in collecting data for the survey.

This organization, composed of representatives of all the public utilities, professional and commercial interests in Princeton, supports this project because of its importance to the community, and we are confident that there will be no difficulty in raising the funds required to fulfill the municipality's share of the costs as given in the Chief Engineer's recommendation.

Favorable action by your committee on the Chief Engineer's recommendation for authorization of this project, which is of vital importance to the future of Princeton, is respectfully requested.

Very truly yours,

E. W. ANDERSON, *Secretary-Treasurer.*

STATE OF WEST VIRGINIA,
Charleston, W. Va., May 31, 1956.

Hon. CHARLES BUCKLEY,
Chairman, Committee on Public Works,
House of Representatives, Washington, D. C.

DEAR MR. BUCKLEY: The city of Princeton, Mercer County, W. Va., is in a position to assume financial responsibility for the construction of Brush Creek flood-control project. The city has no bond indebtedness.

It has statutory authority to issue general bonds in the amount of $378,575 within the constitutional limits, also statutory authority under chapter 8, article 4a, to issue revenue bonds in any amount needed for the construction of flood-control project.

There is ample statutory assurance and authority of their ability to meet their local responsibilities.

Very truly yours,

JOSEPH S. SOTO,
State Tax Commissioner.
By: RICHARD SHELTON,
Rate Analyst.

OROVILLE DAM, CALIF.—H. R. 8677

Mr. DAVIS. Now we will hear from Mr. Brennan on the Oroville, Calif., project.

STATEMENT OF JOSEPH R. BRENNAN, CORPS OF ENGINEERS, UNITED STATES ARMY—Resumed

Mr. BRENNAN. Mr. Chairman and members of the committee, the bill before you for consideration is H. R. 8677, introduced by Mr. Engle. The bill in essence, as introduced, would provide for Federal financial participation in the construction of the proposed Oroville Reservoir by the State of California.

The bill was submitted to the Secretary of the Army for comment, and he has three points to make.

He has agreed with the bill in general, except for these three points. These points are covered by proposed amendments which we understand have been presented to the subcommittee. The bill as originally written provides for a Federal contribution of $100 million for the flood-control aspects of the plan. It also provides that the operation will be consistent with the other multiple-purpose aspects of the dam. The Secretary of the Army's comments were as follows:

With respect to the first point he believes that any allocation to flood control should be dependent upon a final determination to be made at a later date, and, therefore, he recommended that the bill be revised by omitting reference to any specific sum.

The proposed amendments to which I referred contained that provision by eliminating reference to the specific sum.

The second point which was made by the Secretary of the Army is that the contribution should be based upon an allocation of cost to be determined by the Secretary after an economic justification for the allocation of such amount to flood control had been made. That point is covered by the second proposed amendment, which contains language carrying out that suggestion.

The third point involves the operation of the dam, and in place of the wording, on page 2, line 7, "such operation to be consistent with the other multiple purposes of said dam" there is proposed to be substituted the following——

Mr. JONES. Before the gentleman goes on, I am at a loss. He started off talking about amendments and I have not understood the original project yet.

Mr. DAVIS. We heard the original project already.

Mr. JONES. Excuse me.

Mr. DAVIS. The Governor of California was our witness. That is the one.

Mr. JONES. I am sorry. You go ahead.

Mr. BRENNAN (reading):

Such operation of the dam for flood control shall be in accordance with the rules prescribed by the Secretary of the Army pursuant to the provisions of section 7 of the Flood Control Act of 1944 (58 Stat. 890).

The suggestions made in the form of these amendments were submitted for clearance to the Bureau of the Budget, and the Bureau of the Budget has just recently commented in a letter to the Secretary of the Army. The Bureau of the Budget in general favors the assumption of responsibility by non-Federal interests of construction of water-resources projects and approves the purpose of the bill in that connection. However, the Bureau of the Budget states that, with respect to this legislation, it recommends that it be deferred until a proposal has been studied and an appropriate payment and the coordinated plan of operation have been recommended to the Congress for authorization.

It was requested by the Bureau of the Budget that its letter be transmitted to the committee along with the views of the Department of the Army.

Mr. DAVIS. It will be made a part of the record at this point so that Mr. Engle and Mr. Scudder can study those communications with care.

(The letter referred to is as follows:)

Hon. CHARLES A. BUCKLEY,
Chairman, Committee on Public Works, House of Representatives.

DEAR MR. CHAIRMAN: Reference is made to your request for the views of the Department of the Army with respect to H. R. 8677, 84th Congress, a bill authorizing a monetary contribution for the flood-control accomplishments of the multiple-purpose Oroville Dam proposed to be constructed on the Feather River by the State of California.

The Department of the Army has considered the above-mentioned bill. The purpose of the bill is to authorize the appropriation of the sum of $100 million as a monetary contribution toward the construction cost of the multiple-purpose Oroville Dam and Reservoir proposed to be constructed on the Feather River by the State of California. The contribution would be in recognition of the flood-control accomplishments of the dam. The funds would be administered by the Secretary of the Army. The bill provides that, prior to making the contribution, the Department of the Army and the State shall have entered into an agreement providing for operation of the dam in such manner as will produce the flood-control benefits upon which the contribution is predicated.

Preliminary indications are that the flood-control allocation for Oroville Dam would not be in excess of $50 million. With reference to the contribution of $100 million as provided in line 8, page 1 of the bill, since any allocation to flood control should be dependent upon a final determination to be made at a later date, the Department of the Army recommends that the bill be revised by omitting reference to any specific sum. It is recommended also that the proposed legislation be revised to provide that the amount of such contribution as shall be made is to be determined by the Secretary of the Army based upon a finding by the Secretary of economic justification for the allocation of such amount to flood control.

With reference to lines 7 and 8, page 2 of the bill, the language there set forth might permit subordination of flood-control operation to operation for other purposes. It is recommended that the bill be revised to provide that operation of the dam for flood control would be in accordance with rules prescribed by the Secretary of the Army pursuant to the provisions of section 7 of the Flood Control Act of 1944 (58 Stat. 890), which requires the Secretary to prescribe regulations for use of storage allocated for flood control at all reservoirs constructed wholly or in part with Federal funds.

The Department of the Army offers no objection to the enactment of H. R. 8677 if revised in accordance with the above recommendations.

In connection with this bill, the attention of the committee is invited to House Joint Resolution 462, a resolution, now pending before the House Interior and Insular Affairs Committee, for the purpose of granting to the Secretary

of the Interior authority similar to that proposed to be granted to the Secretary of the Army by H. R. 8677.

The Bureau of the Budget advises that there is no objection to the submission of this report. However, the Bureau would recommend that the enactment of the legislation be deferred until the proposal has been studied and an appropriate payment and coordinated plan of operation have been recommended to the Congress for authorization. A copy of a letter from the Bureau of the Budget dated May 11, 1956, is enclosed for your information.

Sincerely yours,

WILBER M. BRUCKER,
Secretary of the Army.

Mr. BRENNAN. The letter from the Secretary of the Army, therefore, which incidentally has just been signed this morning, offers no objection to the enactment of H. R. 8677 as revised in accordance with the recommendations of the Secretary of the Army, which I referred to previously.

The letter from the Secretary of the Army points out the views of the Bureau of the Budget with respect to deferral of the legislation. It encloses a copy of the Bureau of the Budget's letter.

Mr. Chairman, I have not described the project or indicated its location because it has been heard before but, if you wish, I will do so.

Mr. DAVIS. That will not be necessary.

Mr. BRENNAN. That concludes my presentation, Mr. Chairman.

Mr. DAVIS. Are there any questions, Mr. Scudder?

Mr. SCUDDER. Has the bill as you have suggested, with the recommendations, been considered by the Bureau of the Budget? Has that feature been considered by the Bureau of the Budget?

Mr. BRENNAN. Yes, sir. They have considered that and have had the original letter of the Secretary of the Army, which contained those recommendations. But its final conclusion is that any legislation be deferred until a study and cost allocation is made and authorized.

Mr. SCUDDER. Do you have the estimate that the Army engineers made as to the flood benefits that would accrue from this project's being completed? I know that the project would cost nearly $1 billion in all for the overall construction, the major portion, of course, being put up by the State of California for the use of irrigation water and domestic water supply, and so forth, as well as the power that is involved. What is the figure that has been arrived at by the Army engineers as to benefits from flood control?

Mr. BRENNAN. The flood-control benefits, sir, from Oroville Reservoir, with consideration of the devastating floods of December 1955, are very tentatively estimated at approximately $2 million a year. That figure is subject to revision since we have not made a detailed survey. That amount of annual flood-control benefits would probably result in a capital value for flood control in the very broad region between, let us say, $40 million and $60 million. That is a preliminary estimate.

Mr. SCUDDER. Between $40 million and $60 million?

Mr. BRENNAN. Yes, sir. In other words, it would not, in our opinion, on these preliminary figures, based on present prices, be anywhere near the $100 million which was originally contained in the bill.

Mr. SCUDDER. I know that back in 1949 when I first came to Congress that area was in my district, and I had several meetings with

the Engineers. At that time the Bureau of the Budget and the Army engineers and the State were all figuring on that project. In March 1950 I introduced a bill for the construction of this dam by the Interior Department. At that time I know the flood conditions were deemed to be very serious and I made a talk on the occasion of the introduction of the bill to the effect that this was the last great flood hazard to the whole Sacramento and San Joaquin Valleys. This was very well demonstrated by the terrible flood which occurred last winter. That demonstrated the great flood hazard that threatens the whole valley area at the present time.

I do feel the project as outlined now, where the State will put up about nine-tenths of the cost of the project if the Federal Government takes care of the normal flood hazards, would be a good settlement for the Federal Government and would be acceptable to the State of California.

Mr. BALDWIN. Mr. Chairman.

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. Mr. Brennan, have you worked out any tentative benefit-cost ratio for flood-control purposes?

Mr. BRENNAN. No, sir. That would depend upon the detailed survey and studies which have not yet been made, Mr. Baldwin.

Mr. BALDWIN. You have made or given us the tentative figure of $40 million to $60 million as a very rough estimate as to what you feel the flood-control share will probably be in this project. Is that right?

Mr. BRENNAN. Yes, sir; $40 million to $60 million. That is a general range which we feel might be indicative of where the final allocation might fall, but it is based on preliminary findings and it really represents principally the capitalization of our preliminary estimates of average annual flood-control benefits.

Mr. BALDWIN. Could I ask you this further question? From your advance knowledge of the project, are you reasonably satisfied that the benefit-cost ratio would exceed 1 to 1?

Mr. BRENNAN. For the project as a whole?

Mr. BALDWIN. The flood-control aspects of it.

Mr. BRENNAN. Sir, on that point I cannot answer, because it would be dependent on a rather elaborate computation involving an allocation of cost for the 500,000 acre-feet of storage which is proposed now for flood control. But the allocation if made would have a ratio of 1 to 1, or better, since no more than that amount would be allocated to flood control.

Mr. BALDWIN. I see. Since we are going on the basis that you are only going to allocate what would justify it from the flood-control standpoint, then we could be assured, if we acted at this time, that when you finally figured out the Government's contribution that it would be at least 1 to 1 or better?

Mr. BRENNAN. Yes, sir. And it would share in any excess benefit in the same way that the other functions would share in excess benefits, which means that the ratio might be greater than 1 to 1.

Mr. BALDWIN. Thank you.

Mr. SCUDDER. I have one more question, Mr. Brennan. I notice a conflict in the amount of money you set up for the Federal contribution as your estimate of the benefit to be derived. Would it be in order for the bill to be amended to the extent that the amount of con-

tribution by the Federal Government were eliminated and that wording to the effect that when the project were set up that an amount as recommended by the Corps of Engineers could be inserted as the amount which would give a proper ratio between benefits and costs? Would it be a reasonable thing for us to make such a provision in the bill without naming the amount of money involved, and then if the Army engineers found it was $40 million or $60 million, that then the committee would have another look at it to authorize the amount of money that was being set up by the Army engineers?

I am just thinking of something and I know it is very essential for the legislature and the various governmental agencies to get to work on this project, because this involves a terrific hazard to the people there. If all of the agencies could be advised that the Federal Government would meet their responsibility which they have assumed in all other projects, then they could go ahead with their bond issue, or however they are going to endeavor to finance this project, knowing that the Federal Government then would come in and take care of the reasonable amount of Federal participation which would have to be authorized by this committee before the Federal Government would be tied down to participation in it.

Mr. BRENNAN. Yes, Mr. Scudder. That is the purpose of the suggestions by the Secretary of the Army, that the sum specifically named in the original bill be eliminated and that there be substituted for it words which would carry out the purpose of your suggestion.

Mr. SCUDDER. I believe that would give us an opportunity of being able to authorize the project subject to taking another look at it from the standpoint of the Federal Government, as to how much they would participate in it. If your benefits are only $60 million you could not expect that Congress would put up $100 million. Thank you very much.

Mr. ENGLE. Mr. Chairman, I wholly concur in the amendments offered by the Army and submit it as part of my statement. With reference to the Bureau of the Budget's position, it seems to me if the committee wants another look at these figures when they come in, it would be possible to put in the bill a provision that the bill shall be sent back to the committee and that the authorization shall not be effective until such time as the committee had a chance to look at it. That would certainly take care of the Bureau of the Budget's position in the matter, and at the same time would permit us to move forward and get going, because this bill carries a 2-year limitation in it.

These fellows have to get busy or else they will cause you and me trouble out there. That will take care not only of the point made by the Army engineers, but you put a kicker on it that would bring the figures back to the committee for surveillance and give this committee another chance to look at the figures to see whether or not they in fact comply with what the committee desires. I can draft the language that will do that. We very often do that on our Committee on Interior and Insular Affairs on the authorization of projects, where everybody says it ought to be done, but it is just a question of arithmetic. We say, "All right. Bring your arithmetic back and if we do not disapprove it then you have an authorization."

Mr. DAVIS. We will discuss that when we get into executive session. Thank you, Mr. Brennan.

SACRAMENTO RIVER, CALIF., CHICO LANDING TO RED BLUFF

Mr. DAVIS. Sacramento River, Calif., Chico Landing to Red Bluff, House Document 272. Colonel Penney.

STATEMENT OF COL. HOWARD W. PENNEY, CORPS OF ENGINEERS, UNITED STATES ARMY—Resumed

Colonel PENNEY. Mr. Chairman and members of the committee, as you will recall, this project was heard partially previously with a statement from Congressman Engle and local interests who were present. This is a report on the Sacramento River, Calif., from Chico Landing, at the bottom of the map, to Red Bluff, which was authorized by resolutions of the Committee on Rivers and Harbors, House of Representatives, dated September 25, 1945; the Senate Committee on Public Works, June 1, 1948; and the Food Control Act of 1950.

The Sacramento River rises near the Oregon border in the Trinity Mountains and flows south, emptying into the Pacific Ocean through San Francisco Bay. Chico Landing is about 190 miles above the mouth of the river, about 52 miles above Red Bluff. The existing Federal flood-control project on the Sacramento River consists in this reach of elements of the Sacramento River major and minor tributaries project, which are shown on the tributaries of the Sacramento in red and black on this map.

The project was authorized in 1944 and is partially completed.

The Sacramento River old project, as it is known, which was authorized in 1917 and subsequent acts, is for flood control down to the south of Chico Landing. It terminates south of this point.

Shasta Dam, which is operated by the Bureau of Reclamation for irrigation, power, and flood control and other purposes, is located about 65 miles north of Red Bluff and just below it is a reregulating dam known as Keswick Dam.

The problem in this reach of the Sacramento River from Chico Landing up to Keswick Dam has three parts. First, bank erosion at numerous localities on the main stem of the Sacramento River between Chico Landing up to Red Bluff, shown schematically in these blue dots. This is caused by the meandering Sacramento River, which causes many acres of valuable farmland to be eroded and deposited downstream in navigation channels.

Secondly, encroachment has occurred on the floodway which is required for flood-control releases below Keswick Dam from Shasta Dam, between Chico Landing and Keswick Dam.

And, third, flood damage occurs along the Sacramento River and its tributaries.

In this study, levees as shown in green on this map were considered for protection against the flood damage. They are not recommended in the report because of local opposition to the levees. The report recommends measures to deal with the problem of encroachment and deals also with the problem of erosion. Bank erosion is very active, as I said, in many locations along the Sacramento River. An average of about 56 acres a year have been eroded away and deposited downstream in the navigation channels. Damages from this erosion and its deposition average approximately $164,000 a year.

During the recent floods in December and January, about 200 acres were lost, with damages tentatively estimated at about $550,000. The encroachment problem is becoming critical. Some of the pasture and wasteland which has contemplated to be flooded with only minor damage due to flood releases from Shasta Dam has been reclaimed and there are houses being built on the flood plain.

The proposed solution in this report is first the extension of the Sacramento River flood-control project upstream to Keswick Dam for the purposes of zoning the flood plain, the area between the dam and Chico Landing, so that the State and its subdivisions may be able to cope with the encroachment problem. This would not entail any cost to the Federal Government.

Secondly, the extension and modification of the Sacramento River flood-control project by construction of bank-protection works and incidental channel improvements between Chico Landing and Red Bluff to reduce the erosion damage, at an estimated Federal cost of $1,560,000 at January 1956 prices, the work to be done at only those locations which are found to be economically justified at the time of construction, in the light of the conditions then prevailing on the river. The estimated cost to local interests is $36,000 for lands and damages and $25,200 annually for maintenance.

The benefit-cost ratio, based on current prices, is 1.2 to 1.

The Bureau of the Budget had no objection to this report and the reviews by the State and Federal agencies were favorable, and their comments have been taken into consideration.

That is all I have to present, sir.

Mr. DAVIS. Any questiones from the members from California?

(No response.)

Mr. DAVIS. Thank you very much, Colonel. You always do a fine job, and so does Mr. Brennan and all of the corps, as a matter of fact. We are indebted to all of you for your fairness and thoughtful and capable presentations.

Without objection, the committee will stand adjourned until June 14 at 10 o'clock in the morning.

(Whereupon, at 1:25 p. m. the subcommittee adjourned until 10 a. m., Thursday, June 14, 1956.)

FLOOD CONTROL OMNIBUS BILL

THURSDAY, JUNE 21, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10:05 a. m., in room 1302, New House Office Building, Hon. Clifford Davis (chairman of the subcommittee) presiding.

Mr. DAVIS. The committee will be in order, and we are now in session.

MINNESOTA RIVER AT MANKATO, MINN.

First we will take up H. R. 9610, the Minnesota River at Mankato, Minn.

I have a statement here from our colleague, Representative O'Hara, which I shall ask to be made a part of the record. As we all know, Mr. O'Hara was stricken by a heart attack and we are delighted to know he is improving rapidly. We expect him back at his place of duty very, very shortly, but I assured him that this committee would give most careful consideration to the project in which he is interested.

(The prepared statement of Mr. O'Hara is as follows:)

STATEMENT OF HON. JOSEPH P. O'HARA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF MINNESOTA

I desire to make a statement which I would like to submit for the record.

I am informed that the Secretary of the Army has transmitted to the Speaker of the House of Representatives, and to this committee, on June 11, 1956, the report, dated April 30, 1956, from the Chief of Engineers, Department of the Army, together with accompanying papers and illustrations, on an interim report on a survey of the Minnesota River at Mankato and North Mankato, Minn.

I am advised that the State of Minnesota has no objection to this report.

I am also advised that the Bureau of the Budget has no objection to the submission of the report, without commitment as to any estimate of appropriations for the project.

Mr. Chairman, the Minnesota River rises in Big Stone Lake on the boundary of Minnesota and South Dakota and flows southeasterly 224 miles to Mankato, thence north and northeasterly 106 miles to the Mississippi River at Minneapolis. That portion of the river under consideration lies between river miles 101.5 and 109.5. The drainage area above Mankato is about 14,900 square miles. The principal tributary in the Mankato reach is the Blue Earth River, which drains 3,550 square miles of the basin and joins the main stream from the right bank at mile 108.1.

The city of Mankato has a population of approximately 19,000 and is situated generally on the easterly bank of the Minnesota River. North Mankato, with a population of roughly 5,000 persons, is situated on the westerly bank of the river. The principal occupation in the surrounding area is agriculture, and many of

the main industries in the Mankato-North Mankato area are concerned with serving farm needs or manufacturing and processing agricultural products, as well as war needs. There are some large industries which produce rock wool, natural cement, sand, gravel, and various types of limestone.

Floods on the Minnesota River generally occur during the spring as a result of snowmelt and in summer following periods of excessive rainfall. The largest known flood, which occurred in April 1881, following a winter of unusually heavy snowfall, attained an elevation of 777.8 in the vicinity of the present Main Street Bridge. Other large floods occurred in 1897, 1908, 1951, and 1952, and lesser floods in 1903 and 1919.

The April 1951 flood crested at elevation 774.1. This flood inundated North Mankato and parts of Mankato and LeHillier, and required the evacuation of about 6,000 persons when emergency protective measures proved to be ineffective. Damages were large and the area flooded included homes, small business and industrial establishments, schools, and public buildings. Two United States highways, Nos. 14 and 169, and several State highways, are within the flooded area. In the Mankato area the river is spanned by only one highway bridge, which provides the crossing for United States Highway No. 14. The United States district engineer reports that a repeat of the 1951 flood would cause damages estimated at $2,618,600, based on December 1953 prices.

The local interests at Mankato and North Mankato have provided certain temporary protective works, but the district engineer finds a need for extending, raising and strengthening the existing levees at Mankato and North Mankato, enlarging the Minnesota River channel, and providing other pumping facilities, as more fully set out in the report of the engineers. The Board of Engineers for Rivers and Harbors finds that the project is economically justified and recommends its construction, subject to certain requirements of local cooperation.

I am informed that the plan is generally acceptable to the local interests and that they have indicated their willingness and ability to cooperate in the project.

Mr. Chairman, permit me to thank you and the members of the committee for the opportunity to submit this statement to you and to sincerely urge favorable report and authorization of the flood control project for the North Mankato-Mankato area of the Minnesota River in Minnesota, so as to prevent a recurrence of the tremendous financial loss and the dislocation which has occurred to the people and the municipalities and to the public generally of this area.

Mr. DAVIS. In keeping with our policy we will hear first from the Corps of Engineers. We have today Mr. Henry C. Weinkauff, who will present this matter to us.

STATEMENT OF HENRY C. WEINKAUFF, CORPS OF ENGINEERS—Resumed

Mr. WEINKAUFF. Mr. Chairman and members of the committee, this report concerns a local flood-protection project at Mankato, Minn., located 105 miles above the mouth of the Minnesota River. There are no existing Federal projects within the reach under consideration.

Local interests since 1951 have constructed certain works at a cost of $209,000 to protect them partially against floods. They desire additional protection at this time. The largest known flood occurred in 1881, with a flow of approximately 90,000 cubic feet per second. The most recent largest flood occurred in 1951, with a flow of 66,000 cubic feet per second.

A recurrence of the flood of 1951 would cause damages of approximately $3 million on a current price basis.

The Chief of Engineers considered this report and recommends a plan of improvement which provides for raising, strengthening, and extending the existing levees; constructing flood walls and modifying the interior drainage facilities. The estimated Federal cost is $1,870,000, and the non-Federal cost is $157,000, including a cash contribution of $36,000.

The local contribution consists of the usual requirements to furnish lands, easements and rights-of-way; hold and save the United States free from damages; maintain and operate all works and so forth. Then in addition there are other requirements, which include but are not limited to the removal of the small dam on Blue Earth River, and a cash contribution of $36,000, which I mentioned previously.

The annual benefits from this improvement are $124,800. The annual charges are $81,800, and the benefit-cost ratio is 1.53.

The Bureau of the Budget offers no objection and the State of Minnesota favors the project.

That concludes my remarks, Mr. Chairman, unless there are any questions.

Mr. Davis. Are there any questions from our side on this Minnesota River project?

(No response.)

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. No questions, Mr. Chairman.

Mr. DAVIS. We have already put in the record a statement by Congressman O'Hara. May I ask if Mr. Hardig, the mayor of Mankato, is in the room, or if Mr. Daniels, the mayor of North Mankato, is here? The Chair understood that Senator Humphrey was sending those two gentlemen over. I assume if they are present a little later, the committee will listen to them then.

At this point we will insert the letter addressed to the chairman of the subcommittee by Senator Humphrey.

(The letter referred to is as follows:)

UNITED STATES SENATE,
COMMITTEE ON GOVERNMENT OPERATIONS,
June 20, 1956.

Hon. CLIFFORD DAVIS,
Chairman, Subcommittee on Flood Control, Committee on Public Works, United States House of Representatives, Washington, D. C.

DEAR CONGRESSMAN DAVIS: Although I shall not be able to be present on Thursday, June 21, 1956, to testify in behalf of legislation now before your committee to authorize a Federal project for flood protection of the cities of Mankato and North Mankato, Minn., I do hope that you will cause this letter to be printed as a part of the official transcript of the hearing .

In southern Minnesota the Minnesota River winds gently through the rolling countryside for most of the year, through rich farmland and past thriving prosperous towns and cities. But the Minnesota can, and does with great frequency, turn ugly.

The cities of Mankato and North Mankato straddle the Minnesota River where it makes a sharp bend from a southeasterly course to a northward course. Mankato, a city of approximately 19,000 people, is situated on the south bank, while North Mankato, a city of about 5,000 people, lies within the bend of the river on the relatively low ground of the north bank. Mankato is also the site of the confluence of the Blue Earth River with the Minnesota.

These 2 cities from time to time have undergone various degrees of flooding during the spring high stages of the 2 rivers. In April 1951, a severe flood in the Mankato vicinity caused immediate property damage in the two cities amounting to more than $2 million. The actual damage in Mankato amounted to $545,436, while the smaller city of North Mankato suffered even more disastrous damage amounting to $1,552,000. Only the most energetic efforts prevented loss of life in the cities. Following this disaster the two cities undertook to construct a measure of protection for themselves against future flooding by constructing levees, installing pumps and other flood-control works at a total cost of $215,294. It is strongly felt that these works are wholly inadequate for a flood the size of or greater than the 1951 flood, and might, in fact, because the flood channel

has been narrowed, cause even greater destruction if the levees were to break or be overtopped.

It is clear that a comprehensive flood-control project capable of protecting these communities from such disasters as struck them in 1951 is urgently needed. The interim report of the district engineer proposes such a project capable of protecting he cities of Mankato and North Mankato against a flood with discharge about 50 percent greater than that of the 1951 flood—the largest flood of record.

The estimated first cost to the United States is $1,692,000—a sum which is, significantly, several hundred thousand dollars less than the sum of the damage suffered by the citizens of Mankato and North Mankato in a few short days of 1951.

At the same time, the necessary estimated Federal first costs have been materially reduced by the great initiative of the citizens of these two cities in completing, at a cost of over $200,000, certain necessary flood-control improvements.

The city governments of Mankato and North Mankato, the Central Labor Union, commercial interests, and other local interests are on record in favor of the district engineer's report. Responsible local interests have pledged themselves to bear the estimated first costs, annual costs, and to cooperate in every way with Federal authorities.

The protection of Mankato and North Mankato from the spring floods that threaten disaster each year is a most urgent project. The report of the district engineer of the St. Paul District was approved by the division engineer on January 11, 1956.

The report, as you know, was approved by the Board of Engineers for Rivers and Harbors and transmitted to the Congress on June 11, 1956.

I have introduced legislation in the Senate which is identical to the bill now before the subcommittee, and I wish to urge that the subcommittee take favorable action on the necessary legislation now before you.

Kindest regards.

Sincerly yours,

HUBERT H. HUMPHREY.

ROOT RIVER, RUSHFORD, MINN.

Mr. DAVIS. We will pass next to the Root River, Rushford, Minn. We will hear from Mr. Brennan.

My recollection is on this particular project at an earlier hearing we had not had the approval by the Corps of Engineers, and somehow, I think, that is now ready, but we will ask Mr. Brennan to clear us up on it.

STATEMENT OF JOSEPH R. BRENNAN, CORPS OF ENGINEERS—Resumed

Mr. BRENNAN. Yes, Mr. Chairman. In answer to your question, the report has now been cleared by the Bureau of the Budget and been transmitted to Congress.

This is a flood control project, Mr. Chairman and members of the committee, on the Root River and Rush Creek in Minnesota. The report was authorized by the Flood Control Act of August 28, 1937, and it was transmitted to Congress June 11, of this year. It is located in southeast Minnesota, where the Root River joins the Mississippi River a short distance below La Crosse, Wis., downstream from Minneapolis and St. Paul.

The Root River rises in southeast Minnesota and flows about 140 miles east to the Mississippi River. The town of Rushford is located at the confluence of the Root River and Rush Creek. The drainage area of the Root River is 1,150 square miles, including 132 square miles for Rush Creek. The population of Rushford is 1,270. It is the trade center of an agricultural area.

The flood problem arises from two types of floods. There are flash floods, which cause damage on Rush Creek, and slow-rising floods which last for several days and inundate areas along the Root River. The maximum flood on Root River was 32,000 cubic feet per second, which occurred in 1932. On Rush Creek it was 11,600 cubic feet per second and occurred in March 1950. Other floods occurred in the years 1933, 1942, 1945, 1946, and 1951.

The overflow area in Rushford is about 420 acres. The damages from the March 1950 floods were $220,000, and from the March 1952 flood $170,000.

The average annual damage as estimated in the report is $45,230 a year.

Various plans of improvements were considered, Mr. Chairman, including upstream reservoirs, which were not found practicable because of lack of adequate sites. The plan adopted by the district engineer consists of levees along the left bank of the Root River, extending up the right bank of Rush Creek, tying in to high ground at both ends, and protecting the main part of the town of Rushford. Another levee is to be located across Rush Creek on the left bank to protect the part of the town which lies to the east of Rush Creek.

In addition to the levees there will be channel improvement along Rush Creek through the town, and to a limited extent along the Root River where there is a constricted area. The alteration of bridges and the inclusion of interior drainage facilities and relocation of utilities is included as part of the project.

The total cost of the project based on present-day prices is $910,700, of which $795,000 is Federal and $115,200 non-Federal

The total annual charges are $35,120 a year and the benefits, which consist of a reduction of flood damage, amount to $38,840 a year. The benefit-cost ratio is 1.11.

Local interests would be required to provide the usual items of local cooperation, including lands and rights-of-way, maintain and operate the improvement and provide for bridge alterations.

The report was submitted to the State of Minnesota, which is in agreement with the project, to the Department of Agriculture, which made no comments, and to the Bureau of the Budget, which had no objection to the submission of the report to Congress.

That concludes the presentation unless there are questions.

Mr. DAVIS. Anyone on this side?

(No response.)

Mr. DAVIS. Thank you.

Mr. WITHROW. I would like to say this, Mr. Chairman: That my home is in La Crosse, Wis., and I am very well acquainted with this area and I think it is a very,very worthwhile project. They should have relief.

Mr. DAVIS. Mr. Andresen of Minnesota is here, and we will be glad to hear from you now, Mr. Andresen.

STATEMENT OF HON. AUGUST H. ANDRESEN, MEMBER OF CONGRESS FROM THE STATE OF MINNESOTA—Resumed

Mr. ANDRESEN. I thank you, Mr. Chairman, for considering this project. I just want to say I began working on this project as a Member of Congress in 1937 and have consistently worked for it ac-

tively since that time. It is very urgent that we have some action on this project at the present time for the reason that there are several other projects in the area that fit into this scheme of things.

For instance in the Rush Creek area, in the Rush-Pine Creek area, there is a project under consideration, and in actual operation by the Soil Conservation Service. The highway department is constructing a higher levee in cooperation with the Corps of Engineers along where this project is going to go. The State of Minnesota as well as the local parties are expending part of the cost.

While we have not had any damaging flood this year, we can never tell when one will come, because Rushford, which is located in the bottom of the valley, is in such a position that the water down the river goes through that area and generally floods a great deal of the town. It is a good, thriving, progressive country community.

I should not admit that I have been a Member of Congress since 1937, but it is even longer than that. However, having had this interest in the project and working with the local people and also with the Corps of Engineers and the Soil Conservation Service, I want to urge as strongly as I can that this project be included in your present bill.

Mr. Chairman, I want to thank you for permitting me to come here at this time to make this presentation to you.

Mr. DAVIS. Thank you, Mr. Andresen. It has been a pleasure for us to accommodate you. I know we just did get under the wire with this report from the Army engineers.

Mr. ANDRESEN. It means at lot to me to get it into the omnibus bill.

Mr. DAVIS. That is what we are trying to do, and we have our hands full. Thank you.

Are there any questions on this side?

(No response.)

Mr. DAVIS. Any questions on the other side?

(No response.)

KASKASKIA RIVER, ILL.

Mr. DAVIS. Now we pass quickly to the Kaskaskia River in Illinois. We will ask Mr. Brennan to make a statement and we will hear from our colleague, Mr. Mack of Illinois.

STATEMENT OF JOSEPH R. BRENNAN, CORPS OF ENGINEERS—Resumed

Mr. BRENNAN. Mr. Chairman, the bill before you for consideration is H. R. 5430, a bill to authorize the construction of the Shelbyville Reservoir on the Kaskaskia River in Illinois.

The Shelbyville Reservoir is under consideration in the pending survey report of the Corps of Engineers. The river is located in south central Illinois and enters the Mississippi River about 118 miles above the mouth of the Ohio and about 40 miles downstream from St. Louis. The drainage area is an excess of 5,800 square miles and the basin has a total population of about 300,000, including 4 cities of over 10,000 in size.

Farming and industrial occupations are the principal pursuits and the various industries and farming operations are located in all parts of the basin.

Floods occur quite frequently in this basin, on an average perhaps of 3 to 4 times a year. Major floods occurred in 1908, 1913, 1915, 1943 and 1950. The flood of 1943 was the maximum and had a flow of 83,000 cubic feet per second at New Athens, which is located at river-mile 40 above the Mississippi River.

The total damage, according to the computation in the survey report, would amount to about $2 million a year under current prices. There is an authorized project in this basin, Mr. Chairman, which includes Carlyle Reservoir, shown in red on this map, and a number of levee districts below that. The authorized project also includes a levee for the protection of New Athens.

The survey report which I referred to, now under consideration, has reviewed the justification of the authorized project, Carlyle Reservoir, and considered the addition of a new reservoir shown in this location as Shelbyville Dam, and also a number of levee districts located between Shelbyville Dam and the headwaters of Carlyle Reservoir.

The cost of the existing project which is now authorized is $30,320,000 for Carlyle Reservoir; $11,420,000 for the levees below Carlyle; and $1,425,000 for the levee protecting New Athens, or a total of $43,165,000, of which the non-Federal cost is approximately $6,700,000, leaving a net Federal cost of $36,465,000.

The new survey report considers the addition of Shelbyville Reservoir at a presently estimated cost of approximately $22,825,000, and also includes the new levees between the 2 reservoirs at an approximate cost of $10,290,000, or a total additional cost of $33,115,000.

I am using the term "approximate cost" here because the report has not yet been finished, and those figures are based upon the latest available information from the field. They are subject to final computation and subject to the review by the Board of Engineers and the Chief of Engineers, but we feel reasonably confident that they are quite close.

The benefits from Shelbyville Reservoir, which is the subject of the bill under consideration, amount to approximately $1 million based upon the field computations to date, which are still not final. Those benefits are broken down into flood control, navigation, fish and wildlife, recreation, and land enhancement.

The total cost on an annual basis of Shelbyville Reservoir based on January 1954 price levels is $825,000, and the total annual benefit is $1,092,000, giving a benefit-cost ratio of approximately 1.3. That again, Mr. Chairman, I would like to qualify because our benefits have not been finalized and reviewed in Washington, nor have our costs, so the ratio may vary somewhat from that 1.3 to which I referred. However, conferences and discussions with our field people indicate that as of now we feel quite sure that the benefits are going to be in excess of the costs, and the resulting ratio would be certainly above 1.1.

Local cooperation would be required for the various features which are locally beneficial, such as water supply and other items. The amount of local cooperation again will be based on a final cost allocation contained in the report and reviewed by the Board of Engineers and the Chief of Engineers. We are not able to say exactly what that local contribution would be, but to give you an estimate of the general magnitude I would say it would be in the neighborhood of ap-

proximately 15 to 25 percent of the total cost of $23 million for Shelbyville Reservoir.

Mr. DAVIS. Are there any questions from anybody?

Mr. DEMPSEY. I would like to ask a question. The lower portion has been approved; is that right?

Mr. BRENNAN. Yes, sir, Mr. Dempsey. The lower portion is an authorized project and planning money has been actually appropriated for it.

Mr. DEMPSEY. But it will not be sufficient without the upper one; would it?

Mr. BRENNAN. That is correct. The amount of flood-control storage needed is greater than that which can be obtained from Carlyle Reservoir.

Mr. DEMPSEY. So unless we approve the upper one, we are still going to be in trouble?

Mr. BRENNAN. Yes, sir. The basin plan will not be adequate with just Carlyle Reservoir alone.

Mr. DEMPSEY. Thank you.

Mr. BALDWIN. I have a question.

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. Mr. Brennan, you mentioned a farily substantial local contribution. Have you had fairly definite assurances that the local people will be able to raise that portion which will be assessed to them as the local contribution?

Mr. BRENNAN. Yes, sir. There have been conferences and discussions with various local groups, including the town of Shelbyville, and the district engineer feels the assurances he has received are generally in line with those that we expect at the survey stage in project formulation.

Mr. BALDWIN. Thank you.

Mr. BECKER. Mr. Chairman, I got pretty well lost in the maze of figures on this. Do I understand this project runs around $70 million—$33 million on one and $37 million on the other, with a total local contribution of $6 million? Is that it generally?

Mr. BRENNAN. The total includes half which is authorized already and the other half, which is under consideration. Actually the amount under consideration in this bill is $22 million and would just be for the Selbyville Reservoir. In order to give a correct picture of Shelbyville I gave you the figures for the other units of the plan, in other words, of the total of some $69,580,000, $36,465,000 is already authorized. That applies to Carlyle.

Mr. BECKER. What is the local contribution of $6 million? Is that on the $22 million?

Mr. BRENNAN. That is on the lower part of the project, Carlyle Reservoir, and it is added to the $36 million. The contribution on the $22 million, which is the cost of Shelbyville, I said would be generally of a magnitude from 15 to 25 percent, or approximately $3 million to $6 million for this reservoir alone at Shelbyville.

Mr. BECKER. Twenty percent of $22 million would only be $4 million. Where do you get $6 million? That is what I want to find out.

Mr. BRENNAN. I was using round figures.

Mr. BECKER. The round figures are way off by over $1 million. Even taking your maximum figure of 20 percent and your cost of $22 million, it would only be $4,400,000.

Mr. BRENNAN. I think I used 25 percent.

Mr. BECKER. You said just now 15 to 20 percent.

Mr. BRENNAN. I am sorry. I meant to say 15 to 25 percent.

Mr. BECKER. That is what I want to get, in some close figure.

Mr. BRENNAN. The $6 million was based on this computation. The $22,800,000 is an approximate figure and is not exact because final computations have not been made. So I allowed that to be increased to $24 million and took 25 percent of that to get the $6 million as one ceiling.

Mr. BECKER. That is all.

Mr. DAVIS. Are there any other questions?

(No response.)

Mr. DAVIS. Thank you, Mr. Brennan.

We will hear from Mr. Mack of Illinois now.

STATEMENT OF HON. PETER F. MACK, JR., MEMBER OF CONGRESS FROM THE STATE OF ILLINOIS

Mr. PETER MACK. Mr. Chairman, how much time do you care to give me? I feel this is a somewhat complicated problem we have today. I have a statement here that I would be willing to file, providing everyone understands the situation here with regard to the projects.

Mr. DAVIS. I wish you would.

I might explain to our colleague that he is coming pretty late in our hearings. We have been trying to close these hearings for weeks, but I know you have been diligent. You have spoken to me a great many times about the matter. What has been our delay up to now? Was it waiting for the report of the Army engineers?

Mr. PETER MACK. Mr. Chairman, I certainly appreciate your consideration in hearing this particular proposal.

As I stated, this is rather complicated, and it covers a period of approximately 3 years, or 3 to 4 years. It is as a result of this new survey report that came out here. The first I heard of it was on the 26th day of January 1954. As a result of that, it triggered off this whole program for the Kaskaskia.

I might say that the local contribution is something that you do not have to worry about. If anything, they have the cart before the horse. The local communities are willing to make whatever contribution is necessary to go ahead and complete this program.

The Kaskaskia Valley Association as a whole is very much interested in this.

I will try to limit my remarks today just to give you a brief outline of what has happened up to this point, if that is agreeable with you, Mr. Chairman.

Mr. DAVIS. Yes.

Mr. PETER MACK. I received this report from the Corps of Engineers on January 26, 1954. A similar copy was sent to both Senators from Illinois and to my colleague, Congressman Vursell, in the district just below me, and the gentleman representing this district

where Carlyle Lake is located. As a result of this survey report that is now being completed, they immediately started this program off for the development of Carlyle Lake, which had been authorized in 1938. Nothing had been done on it up to the present time.

I might also mention that in 1938 the Congress requested an additional survey to be made of the entire Kaskaskia Valley program, anticipated something such as developed today. They had authorized the lake at Carlyle but they requested this survey be made. That is the report that is now being completed and which will be sent out to the Chief of Engineers very shortly.

In the meantime the Governor of Illinois approved the report, and the State legislature passed a resolution favoring it, and all of the communities up and down the river have been in complete support of this program. I can say without reservation that I do not have one single person who has written to me concerning the Shelbyville Dam proposal in opposition to it, and I think that is rather unusual.

When the report was submitted they immediately came to the Congress and requested an authorization. There was some development to proceed on this particular report, but since the Carlyle portion had been authorized and the Shelbyville portion had not been authorized, the planning money naturally was allocated for the Carlyle area.

Briefly, the situation is this: In the appropriation bill for 1955 there was $50,000 authorized for the Carlyle area for planning and designing. In the 1956 appropriation bill there were $75,000 appropriated. In the 1957 appropriation the House approved tentatively, and Congress tentatively approved, $200,000.

Now you have $325,000 that is already being spent for planning in the Carlyle area when it should be spent planning for the entire Kaskaskia River Valley. That is the reason why I think it is imperative that we take some action today. Needless to say, next year when we have the appropriation bill up before the Congress there will even be a larger amount spent on planning in the Carlyle area.

As the Army engineers have indicated, one is dependent on the other and the planning should be interrelated. When they are planning for one project they should also be taking into account the effect of the other project. That is the reason why I have requested to be heard on this. I have urged the Corps of Engineers to submit their report, and I understand that it is going to be submitted within the next 8 days. I wanted to be sure to get here at this time not only because of the interest in this project in my district, but in the interests of economy and saving money on such planning programs that are now in progress.

Mr. DAVIS. I am afraid we will never get a bill out if we keep on waiting for these reports to come in. Mr. Brennan, what has been the delay? Governor Dempsey suggested to me all you want now is authority to do the complete planning job. Is that correct? Is there no construction involved?

Mr. BRENNAN. You are asking me, sir?

Mr. DAVIS. Yes.

Mr. BRENNAN. What we have, sir, is a survey report which will come here for authorization and which will give us authority for construction.

Mr. DEMPSEY. Mr. Mack is asking for planning money for the upper part of this program. Is that right?

Mr. PETER MACK. May I say that no money can be spent for actual construction or planning of the actual dam unless the project is authorized. Am I correct on that? Therefore, none of the money that is presently authorized can be spent on anything other than the Carlyle area. I believe I am correct in that.

Mr. BRENNAN. That is correct.

Mr. DAVIS. In other words, part of it has been authorized but the part which has been authorized would be ineffective in controlling the floods unless the rest of it was authorized. Is that correct?

Mr. BRENNAN. That is our conclusion, sir, in the report in the field.

Mr. PETER MACK. That is my understanding. My point in particular of urging this immediately is so that the whole valley can be developed, instead of continuing to develop it on a patchwork basis, taking one area and one reservoir and forgetting about the other.

Mr. BECKER. Mr. Chairman, do we have a bill on this?

Mr. PETER MACK. I introduced a bill, H. R. 5430, I may say, 1 year ago. I introduced the bill at the request of the people in the Shelbyville area.

Mr. BECKER. What does the bill say and what does it call for?

Mr. PETER MACK. The bill calls for authorizing the Shelbyville project as well. The bill authorizes the Shelbyville project.

Mr. BECKER. Does it authorize construction?

Mr. PETER MACK. Yes.

Mr. BECKER. The bill authorizes construction?

Mr. PETER MACK. Yes. It is similar to the authorization, or it is identical to the authorization which is now existing for the Carlyle area.

Mr. BECKER. But the one in the Carlyle area is one project. This is a continuing project or an extension of the project. All I want to know is, does this bill call for money for construction of the Shelbyville Dam and area?

Mr. PETER MACK. Yes, sir. It is identical, as I understand it—and I had assistance with this legislation—this bill is identical with the authorization for Carlyle, which would put both Carlyle and Shelbyville in the same category.

Mr. DEMPSEY. But you are not asking for any construction money now at Carlyle? This is planning money, is it not?

Mr. PETER MACK. Yes, sir. It has been in planning for the actual construction.

Mr. DEMPSEY. And that is all you can do up there for a couple of years, is the planning, is it not?

Mr. PETER MACK. Yes. But you can plan the entire program providing this is authorized. Presently no money can be spent in the Shelbyville area because it is not authorized.

Mr. DEMPSEY. I want to say that I understood Mr. Brennan to say the lower part would be inadequate without the upper part.

Mr. BALDWIN. If the gentleman will yield, the bill goes beyond planning, because it says:

To authorize the construction of the Shelbyville Reservoir * * * at an estimated cost of $22 million.

Mr. PETER MACK. Yes, sir. I was not trying to mislead anyone, but I am trying to say that the bill authorizes Shelbyville exactly in the same manner as Carlyle has presently been authorized. Therefore both of them can be considered in planning; presently the Shelbyville area cannot be considered because it is not authorized. I am trying to put Shelbyville on the same level with Carlyle.

Mr. DAVIS. Thank you, sir.

Without objection, your prepared statement will be made a part of the record at this point.

(The prepared statement of Mr. Peter Mack is as follows:)

STATEMENT OF HON. PETER F. MACK, JR., REPRESENTATIVE IN CONGRESS, 21ST DISTRICT OF ILLINOIS

Mr. Chairman, I appear here today in support of H. R. 5430 which I introduced on March 31, 1955. This bill would amend section 4 of the act entitled, "An act authorizing the construction of certain public works on rivers and harbors for flood control, and for other purposes" approved June 28, 1938, to provide for a reservoir at Shelbyville, Ill., on the Kaskaskia River. The Kaskaskia River is second largest in the State of Illinois. This river handles most of the watershed between the Wabash and Illinois Rivers extending into the heart of the State and flowing into the Mississippi River in southern Illinois. The Kaskaskia services and drains 22 counties, representing approximately one-fourth of the State of Illinois. Control of the floodwaters on this river is vital not only to Illinois but to the lower Mississippi as well.

The Kaskaskia River is noted, not only for its disastrous and costly floods, but also for its extremely low levels during the dry seasons, thereby causing the Kaskaskia Valley Basin to be annually threatened with the prospect of disastrous floods followed by prolonged and dangerously low water supplies which now endanger the welfare of the people and acutely increase the economic necessities of the area.

The Flood Control Act of 1938 authorized a general comprehensive plan for the upper Mississippi River. The Carlyle, Ill. Reservoir was authorized by this act and was the only reservoir on the Kaskaskia so authorized. No subsequent authorization has been made for additional Kaskaskia reservoirs. However, the 1938 Flood Control Act called for a review survey of the entire Kaskaskia Basin. This survey was completed in 1954 but was returned to the district office in St. Louis for additional information. It is my understanding this report is now being completed and will be submitted to the Chief's Office within the next week.

This survey proposes the development of two storage reservoirs which would be preferable to the single storage facility which was authorized in 1938. This report proposes one storage reservoir at Shelbyville, Ill., and one at Carlyle, Ill.

The primary purpose of this investigation was for flood control but consideration was also given to the other allied water uses such as water supply, pollution abatement, and recreational development of the Kaskaskia River Basin. As a result of the survey report submitted by the district engineers, which was announced January 26, 1954, action was taken to initiate the Kaskaskia Valley program. In the 1955 appropriation bill, $50,000 was allocated for advanced engineering and design on the Carlyle Reservoir. An additional amount of $75,000 was allocated in the 1956 appropriation bill. This year, the Congress has tentatively authorized $200,000 to continue the planning for the Carlyle project. No funds were carried for the Shelbyville project and none can be diverted to this project until it is authorized by Congress.

Mr. Chairman, I have repeatedly pressed for an early determination to be made on the Corps of Engineers' survey report. We would be making a serious mistake—by wasting thousands of dollars in Government funds—if we do not consider the second reservoir at Shelbyville in the planning and the advanced engineering now being conducted on the Kaskaskia River at Carlyle. It appears this will be recommended in the survey report of the Corps of Engineers.

Mr. Chairman, it is urgent that we act immediately as $325,000 has been appropriated including the amount in the 1957 appropriation bill. Next year there will undoubtedly be a still larger amount of money spent for this purpose. Therefore, in the interest of economy and in the interest of sound adminis-

tration, it is imperative that we consider the proposed legislation before Congress adjourns this year. It would be extremely ill-advised to delay the authorization of the Shelbyville Reservoir as this would give us a patchwork approach to our flood control problems.

I am fully aware of the great work your committee has done and of your continuing interest in sound flood control legislation. I know that you are aware of the difficulties which will be encountered if we approach the Kaskaskia River Basin flood control project in a halfhearted way by constructing the Carlyle Reservoir now and the Shelbyville Reservoir 3 or 4 years later. I earnestly believe if we are to have two reservoirs in this valley that the authorization bill should be passed immediately so that the Corps of Engineers can plan on the second reservoir when carrying on their work and making their study of design on the Carlyle project.

Each reservoir must be planned with the operational functions of the other in mind. Therefore, Mr. Chairman, I ask the indulgence of this great committee of the House of Representatives to give favorable consideration to this legislation before Congress adjourns this year.

Mr. DAVIS. Has the mayor of Mankato, Minn., come in? I suppose not. And neither has Mr. Daniels.

Mr. BALDWIN. Would it be in order to move that if they have statements we will allow them to submit a statement for the record in connection with that project?

Mr. DAVIS. Yes. It is entirely in order, and we will accommodate them in just that way.

I am anxious to go into executive session and I would like to make this statement.

Our colleague, Mr. Withrow, just brought to my attention a matter that must come up tomorrow, but I tell you about it now because I think we had better agree to shut these hearings off now. We will take care of your matter and try to take care of the members of our committee, but I want to say if we are going to try to adjourn July 15, all of us who have been here for a few years know what we are up against. We are going to have a logjam and I think we have spent so much time on this bill that we must make every effort to expedite its conclusion.

If I do not have any objection from any of you, I will simply announce that as of today it is all over, except for yours tomorrow, Mr. Withrow, and your three Wisconsin colleagues.

Mr. DAVIS. Now we go into executive session.

(Whereupon, at 10:45 a. m. the subcommittee went into executive session.)

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FLOOD CONTROL OMNIBUS BILL

FRIDAY, JUNE 22, 1956

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON FLOOD CONTROL
OF THE COMMITTEE ON PUBLIC WORKS,
Washington, D. C.

The subcommittee met, pursuant to call, at 10:10 a. m., in room 1302, New House Office Building, Hon. Clifford Davis, chairman of the subcommittee, presiding.

Mr. DAVIS. The subcommittee will be in order. We will attempt to expedite this morning's work as much as possible. This concludes all of the hearings of this committee on items which may likely be included in the omnibus bill.

BUCHANAN RESERVOIR (H. R. 9885 AND H. R. 9886)

First we take up H. R. 9885 by Representative Sisk, to authorize a project for the Buchanan Reservoir on the Chowchilla River, San Joaquin Valley, Calif., and then H. R. 9886 by Representative Sisk, to authorize the project for the Hidden Reservoir on the Fresno River, in the San Joaquin Valley, Calif., both for flood-control purposes. We will hear from Mr. Carter Page representing the Corps of Engineers.

STATEMENT OF COL. HOWARD W. PENNEY, CORPS OF ENGINEERS UNITED STATES ARMY—Resumed

Colonel PENNEY. With your permission, sir, I will testify rather than Mr. Page.

Mr. DAVIS. Yes, sir. We are always glad to hear from you, Colonel Penney.

Colonel PENNEY. Mr. Chairman and members of the Committee; with your permission I will testify on these two bills simultaneously as they are similar.

The purposes of H. R. 9886 and H. R. 9885 are to authorize the construction of Buchanan Reservoir on the Chowchilla River and Hidden Reservoir on the Fresno River in the San Joaquin Valley in California, for flood control and other purposes, substantially in accordance with the recommendations of the Chief of Engineers, in House Document No. 367, 81st Congress.

The recommendation of the Chief of Engineers in that document recognized the desirability for proceeding as rapidly as possible with flood control, and provided for construction of those projects and their operation solely for flood control until repayment arrangements for

their irrigation purposes were made by the Bureau of Reclamation.

I shall describe these projects very briefly as contained in that report of the Chief of Engineers of 1948 and as supplemented by current information and approximate data as to their costs and benefits.

The Chowchilla River is an eastern tributary of the San Joaquin River. It rises in the Sierra Nevada and flows generally west past the town of Chowchilla. There is no existing flood-control project on the Chowchilla River. The Buchanan Dam would be located 15 miles east of that town of Chowchilla, which incidentally has a population of 3,900 people.

The reservoir would have a capacity of about 70,000 acre-feet for flood control and irrigation. It would provide flood protection to the town of Chowchilla and to about 50,000 acres of cultivated land and, in conjunction with the proposed Hidden Reservoir on the Fresno River to the south would provide additional flood protection on the San Joaquin River downstream.

Significant flooding occurs on both the Chowchilla and Fresno Rivers during the winter months. The flood of record was in 1938 and serious floods also occurred in 1950 and 1955. The estimated cost of the Buchanan project on the Chowchilla River at the time of the report was $7,247,000, with a benefit-cost ratio of 1.12 to 1. Current approximations of costs and benefits are: estimated cost of $10,900,000 and estimated annual benefits from flood-damage reduction of $320,000 and from irrigation $410,000. The benefit-cost ratio on that approximate basis would be about 1.6 to 1.

The Fresno River flows generally parallel to the Chowchilla River and just south of it past the city of Madera, which has a population of about 10,500 people, and the Hidden Dam would be located to the east of Madera, some 15 miles, and it would have a reservoir capacity of about 90,000 acre-feet for flood control and irrigation. Like the Buchanan project it would provide for increased flood protection downstream on the San Joaquin, as well as protection of the city of Madera, and flood protection to some 60,000 acres of cultivated land, and provide about 25,000 acre-feet of additional irrigation water annually.

The estimated cost at the time of the report on the Hidden Reservoir on the Fresno River was $8,367,000, with a benefit-cost ratio of 1.12 to 1. The current approximations of the benefits and costs show a cost of $12,500,000 and benefits annually from flood-damage reduction of $440,000 and irrigation $480,000, with an approximate benefit-cost ratio of 1.85 to 1.

Local interests would be required to repay project costs on the projects allocated to irrigation. At the time of the report the State of California recommended deferral of the projects until they were needed and justified for irrigation as well as flood control. The State of California now favors the projects with such modifications as may be necessary to fit their conservation features into the State water plan.

In commenting on these bills the Secretary of the Army has just submitted his proposed comments to the Bureau of the Budget. He points out in his comments that the Secretary of the Army in this same document, House Document 367, based on the conclusion that the report of the Corps of Engineers did not contain sufficient information

for authorization of these projects, recommended that further investigation be made to justify their authorization for construction. As this study has not been made by the Corps of Engineers, and in view of the fact that the Bureau of Reclamation now has these projects under restudy as part of their East Side Division, Central Valley Study, the Secretary of the Army suggests that the Congress may wish to defer further consideration of these bills pending completion of that study.

He also suggests if authorization of these projects is to be considered at this time the bill should provide that assurances for repayment arrangements for the irrigation allocation be obtained prior to construction, and be obtained, as was recommended by the Chief of Engineers, by the Bureau of Reclamation. The Bureau of the Budget has not yet commented on these bills.

Mr. DAVIS. So as of the moment you do not recommend passage?

Colonel PENNEY. Sir, we are not in a position to recommend the authorization on the basis that the report was at the time considered not sufficient, and although we have additional approximate data, we have no further study than was made at that time.

Mr. SMITH. That applies to both reservoirs?

Colonel PENNEY. Yes, sir.

Mr. DAVIS. Are there any questions?

Mr. CLARK. In regard to the floods that have been occurring recently and doing so much damage, what are we going to do if we do not get these authorized at this time, in order to stop that flood damage?

Colonel PENNEY. The Corps of Engineers feels that these projects are needed for flood control. Actually, damages did occur in 1955 on these rivers, and these projects would have prevented a large measure of damages. However, the situation is that the report has not yet been restudied and it is under restudy by the Bureau of Reclamation, so that we are not in a position to recommend the authorization at this time.

Mr. DEMPSEY. When will that study be complete?

Colonel PENNEY. I understand that the report of which these two reservoirs are a part, was initiated in the fiscal year 1956, and that the Bureau of Reclamation contemplates their completion of the study in fiscal year 1958.

Mr. BALDWIN. You have quoted some benefit-cost ratio figures as of the present time. If those figures are sufficiently fixed so that you can give them to us, what do you anticipate is the problem?

Colonel PENNEY. Sir, those figures are based upon approximations by escalating the costs up from 1948 and by a general appraisal of the situation on benefits, taking into consideration floods and the frequency of those floods which have occurred since; but we have to regard them as an approximation since we have not made a detailed study since that original report.

Mr. SCUDDER. Colonel, do I understand you to say that these were set up for study in 1956?

Colonel PENNEY. By the Bureau of Reclamation.

Mr. SCUDDER. That is this year?

Colonel PENNEY. They initiated the study as I understand it in fiscal 1956, and it is actively underway and is contemplated for completion in fiscal 1958.

Mr. SCUDDER. How does this authorization come before the Public Works Committee if the Bureau of Reclamation is making the study?

Colonel PENNEY. Sir, these projects were recommended in a report of the Chief of Engineers in 1948. However, it was considered by the Secretary of the Army—first I should say they were not recommended by the Secretary of the Army—it was considered that the study was not of sufficient detail to establish their justification, and his recommendation was for further study of the project.

Mr. DAVIS. Mr. Sisk, will you come around? We are disappointed this morning. You have been so insistent about this project, but the Corps of Engineers says the investigation instituted in 1956 cannot possibly be completed until fiscal year 1958. So that puts us in a bad position here.

STATEMENT OF HON. B. F. SISK, MEMBER OF CONGRESS FROM THE STATE OF CALIFORNIA

Mr. SISK. Mr. Chairman, I am certainly, of course, quite disappointed this morning to find the recommendation such as it is. It had been our belief, and certainly we had felt it was based on some pretty good factual information, that this definitely would be recommended. I realize, of course, that in recent weeks, due to discussions that have gone on between the Corps of Engineers, and the Department of the Interior and the Bureau of the Budget, there has been a little bit of confusion that developed. Of course, I have had some meetings with the Bureau of the Budget on this particular project.

Initially, apparently, we had a very firm and favorable consideration by the Army engineers. I would like to clarify one thing, and that is that so far as I know the Department of the Interior and the Bureau of Reclamation, which is part of it, are not engaged in any studies at the present time.

Before I introduced these bills, Mr. Chairman, I discussed this with Mr. Dexheimer of the Bureau of Reclamation and they informed me they were not interested in this particular thing at the present time and did not know whether they would be because of the attitude of the State of California over a period of years.

The Army engineers a number of years ago made studies and recommended the need for these projects and came up with figures giving the benefit-cost ratio as well as the need for construction. The State legislature then, on the basis of that, passed resolutions which I have here this morning, asking for immediate construction. Of course, I have a great many resolutions from people in the area, so that certainly it was my understanding, and I know in the State they are completely unanimous in their desire to have these projects constructed.

The idea of a restudy now by the Bureau of Reclamation actually comes as something new to us because there is no study—and I talked as late as yesterday with the people in the area—there is no study of any kind that we know of going on by the Bureau of Reclamation. Further, I have some letters from the Commissioner in the past 5 or 6 months indicating that they did not anticipate any likelihood until they were requested by the State of California to come in, which might be possibly in 1958 or 1959. Certainly, on the basis of that, Mr. Chairman, I introduced the bills and, of course, I have been asking for hearings because our people suffered just this last year and this winter over $2 million in damages in this particular area. We had severe damage in 1950. We have had a continuing stream of damages. These

Works Committee if the Bureau of Reclamation is making the study?

were studied back 10 or 12 years ago and in 1947 or 1948 this report came down recommending the construction of these as a flood-control project.

So I say in all good conscience and in complete sincerity I introduced the bills and asked for this committee's consideration because it is certainly a little difficult to continue year after year to explain to our people why something is not done when we look at the studies that have gone on over a period of a great many years.

I might say, Mr. Chairman, I do have a prepared statement. Further, I would like to state that I had a great many people in the area who would like to have come down here—a rather large delegation in fact. I informed them that because of the time element and the rush of your committee to complete this bill I did not feel it would be necessary and we would do the best we could to present the case, and I would explain the deep interest of all the people in the area. I think in the interests of time I will submit my prepared statement for the record.

Mr. DAVIS. Without objection your full statement will be included in the record at this point, in addition to what you have already said.

Mr. SISK. Thank you.

(The prepared statement of Mr. Sisk is as follows:)

STATEMENT OF B. F. SISK, A MEMBER OF CONGRESS FROM THE STATE OF CALIFORNIA

Mr. Chairman, I appreciate the opportunity to appear before your committee in support of the bills I introduced for authorization of two urgently needed flood control and conservation projects on the Fresno and Chowchilla Rivers in Madera County, Calif. I know your time is limited and I will be brief, but I know you will not thereby underestimate the urgency and importance of these projects and their great significance to the people of my district.

To censerve the committee's time and because they are some 3,000 miles from Washington, the people of my area have authorized me to represent them and present their statements to the committee.

H. R. 9885 would authorize Buchanan Dam on the Crowchilla River and H. R. 9886 would authorized Hidden Dam on the Fresno River. These two streams are tributaries of the San Joaquin River, which drains the southern half of the Central Valley of California. They are rainfall rivers, arising in the lower ranges of the Sierra Nevada. As a consequence, they vary widely in their flow. At times the stream beds are dry, while with heavy winter or spring rains, they flood.

Twice in the last 5 years, and on an average of more than 1 year out of 3, these streams do great damage. In December of 1955 the Chowchilla River alone did $500,000 worth of damage to farm property, an equal damage to county and State roads, canals, and irrigation structures and $100,000 damage to business places and homes in the city of Chowchilla, a total in excess of $1 million. The Fresno River flood at that time did equal damage to property in the vicinity of the city of Madera. Similar, though less severe, floods occurred in 1950 and on back through the 100 years since these areas were settled. The people of Madera County have a favorite saying that they have paid in flood damage for these dams many times over, but still don't have them and must look forward to a continuing threat flowing from the hills.

I think members of the committee may be interested in some pictures and news accounts of floods in the Madera County area from these streams and I hope you will look at them while my statement is in progress. They were compiled by the Chowchilla Water District and reflect conditions in that area which would be avoided by construction of Buchanan Dam.

Every responsible local, State, and Federal agency joins in recommending construction of these dams. They were recommended for immediate construction in reports of the Corps of Engineers as far back as 1947. The Department of the Interior recommended them for construction immediately after World War II in its report on the Central Valley Basin. The Legislature of the State of California has memorialized Congress to authorize both dams. The Governor

of California has given his approval and the authorizations are urgently recommended by the California State Water Resources Board and the State engineer. I will ask the committee to consider resolutions urgently requesting your action from the Madera Irrigation District, the Chowchilla Water District, the board of supervisors of Madera County, the city councils of the city of Madera and the city of Chowchilla, farm and business groups as well as a great number of individuals.

A large percentage of the benefit from these projects will be realized through flood control, but they also will perform a valuable function in conserving badly needed irrigation water, which is in very short supply in our area. Though the amounts of usable water will be irregular, I cannot overemphasize the urgency of storing and keeping every drop of water which otherwise would waste away to the ocean in menacing floods.

I know from past experience and the statements of members of this committee that you will be glad to know that the farmers who will receive this irrigation benefit have overwhelmingly declared their willingness to pay these reimbursable costs and to enter into contracts to do so. They want these dams, knowing full well they are going to have to share in the cost, because they need the water delivered to their fields when they can use it and having an end to the floods which periodically wipe them out is urgently necessary.

I have with me and will present to the committee, resolutions of the boards of directors of the Chowchilla Water District and the Madera Irrigation Districts expressing their willingness to share in the costs and I know this also reflects the views of farmers outside the districts who would share in the irrigation benefits.

These are not major projects in comparison with many of the proposals before you. They are comparatively modest in cost, but they will provide a solution to the major problem facing thousands of people in this area. The Federal Government, State, and local agencies have placed many tributaries of the San Joaquin River under flood control. Even now the State is building flood-control works along one stretch of the river and the Corps of Engineers is engaged in similar work along another. These two streams contribute to the problem on the main river, so that in addition to the immediate protection in Madera County, these dams will contribute substantially to a solution of the flood-control problem for the entire basin of the San Joaquin.

These are good projects. They are unanimously supported and recommended by all agencies and by the people directly benefited, who have been waiting a long time. I sincerely hope you will recognize their needs and help them.

Mr. SISK. Mr. Chairman, if I could have a few moments I would like to pass around some pictures of what actually happened in this area in 1955, showing some of the conditions that exist in the area. I would like to have the committee take a quick look at them.

In addition to the statement which I have prepared, I also have as I mentioned a Joint Resolution No. 3 from the California Legislature of March 28 calling for memorializing Congress to construct these two projects. In addition to that I have a statement by Mr. Eastman, dealing with the Chowchilla River and particularly the Buchanan Dam, with a chart of the flow of the Chowchilla River from 1920–22 up through the 1953–54 season, and I would like to have that made a part of the record.

In addition to that I have numerous resolutions from the Chowchilla and Madera Water Districts and Board of Supervisors of Madera County, the Grange, and various Farm Bureau groups as well as chambers of commerce and individuals, clubs, and so on. I would like to submit those for the record, or for the file, based on your determination of the proper place for those, Mr. Chairman.

Mr. DAVIS. I think your statement on their interests is enough, frankly, and it will not be necessary to place them in the record. Governor Dempsey has a very good question.

Mr. DEMPSEY. Did you say this was previously authorized by the Army engineers on a strictly flood-control basis?

Mr. SISK. Pardon me. I did not mean to say previously authorized. If I said "authorized" that is of course in error. What I mean is they studied the project which I believe I said was in 1947, indicated the need. In other words, they actually endorsed the project and their study showed the need for it. It was included in House Document 367, I believe, of the 81st Congress as I recall it. That was on the need for this.

With the information in that, as well as later recommendations by the Corps of Engineers, of course, as I say it comes as a distinct disappointment to me this morning because we feel or felt we would definitely have a favorable recommendation. Of course, I appreciate what has come up which I will be frank to say is apparently some difference in opinion now in the Bureau of the Budget as to whether the Corps of Engineers should build the project or the Bureau of Reclamation. Let us toss it out into the open. I am of the opinion it should be built by the Corps of Engineers. I will hasten to say that I have nothing against the Bureau of Reclamation. As some of you certainly know I am a member of the Committee on Interior and Insular Affairs which handles Bureau of Reclamation projects, and certainly had I felt this was that type of project I would have introduced legislation bringing it before the committee of which I am a member. But with the recommendations and studies we have had over a period of years and the percentage of benefits from the project, and the type of project it is, on that basis I introduced legislation calling for construction by the Corps of Engineers, believing it to be that type of project. Of course, as I say, I feel it is unfortunate that this has come up.

I have some letters here I believe from General Itschner and others stating the fact that the flood-control benefits would run 70 to 90 percent of the project, actually leaving a very small percentage for irrigation. At the same time, of course, we want all of the water conservation we can get out of the project because we seriously need every drop of water we can get.

Mr. DEMPSEY. I appreciate that because I know the location, but I do not understand how the Bureau of Reclamation gets into the situation under your bill.

Mr. SISK. I might say, Governor, they do not get in under my bill. The bills which I have introduced very specifically call for construction by the Army engineers, but to clarify it just a little bit, as you probably know, there have been some things happening in our area, particularly one area, Pine Flat in the Kings River Conservation District where some differences developed over a project built by the Army engineers, and then under Executive order the water was turned over to the Bureau of Reclamation for handling. Not having had a contract previous to construction they have had some years of difficulty. I am sure the gentleman from California, Mr. Scudder, is familiar with that. Because of that history and the problems I think there was some little concern on the part of the Bureau of the Budget that we are getting into a project where there are both irrigation and flood-control projects and they want to avoid it.

I would propose an amendment to these bills setting forth that no construction could begin until assurances were given or a general

agreement had been reached, setting forth the repayment of those reimbursable portions of this particular project, because I think it is only fair to the Congress and only fair to the people.

I have a number of resolutions stating that the people themselves desire to pay for any portion of the project which is chargeable to irrigation benefits. Further than that, in the past week I have had agreement from them that they would be happy to see the contracts and agreements made prior to the start of any construction and that that should be done so that there could be no problem at a later time as to repayments.

Mr. SCUDDER. There is precedent for the fact that the Army engineers might construct the project, Mr. Sisk, and then the irrigation water that would be sold would be sold by the Bureau of Reclamation, so that they would be collecting the reimursable part from the local interests. Is that not correct?

Mr. SISK. That is correct, and in my own district it exists on the Pine Flat project I mentioned, and it could be done very equitably in this particular legislation, I think. I might say, Mr. Chairman, as I apologized in the beginning for having pressed for these hearings on the basis that I felt we would have complete agreement all the way down the line with the departments, and it places me in just a little bit of an embarrassing position. On the other hand I am laying it before your committee with the evidence I have here as to the need for the projects and the studies that have gone on. Of course I leave it up to the determination of your committee as to whether or not you feel it should be included in the omnibus bill which you are preparing. Naturally, it is the very vigorous desire of the people in my area that it be included because they are anxious to get on their way and they feel over a period of years they have paid for these projects time after time and through the damage to their homes and business properties and farm properties and other things.

Certainly I am asking your committee for all of the consideration you can possible give me on this project in the face of what we feel would be an extreme need in our area.

Mr. ROGERS. Mr. Chairman, may I ask a question?

Mr. DAVIS. Mr. Rogers.

Mr. ROGERS. Mr. Sisk, do I understand it rightly that the trouble with the project right now it seems is there is just a jurisdictional question as to whether the Army engineers should go in or the Bureau of Reclamation people of the Department of the Interior?

Mr. SISK. I might say to the gentleman from Florida that basically I think that is one of the problems we have been faced with, and that has brought about the type of report we have. We did not anticipate and knew of no such condition at the time the legislation was introduced. We have no problem in the area. The people are not too much concerned as to who constructs it.

We have the facts set forth in the documents going back to the 81st Congress and giving the full report. Based on those reports and the facts set forth in them with regard to water-conservation and flood-control benefits, we brought up legislation calling for the Army engineers to construct it as a flood-control project. Therefore, this confusion which has possibly created the situation this morning here is new to us out there. There is no confusion in the area. I might say

that the people in general feel very favorably toward the Bureau of Reclamation and have no objection to their constructing it, but it is a matter of fact that these have always been flood problems and as such it is my feeling and certainly the feeling of the people of my area, that it should be in that category.

Mr. ROGERS. When was the last flood?

Mr. SISK. 1955 and 1956. That was last December. The damage in this one area alone was over $2 million.

Mr. DAVIS. You are certainly to be commended, Mr. Sisk, for your diligence in this matter. I know everyone on this committee is entirely sympathetic to your needs. You have made a fine statement as to the need and you have not let a stone go unturned in an effort to include this in the omnibus bill. I hope you appreciate the difficulty that faces us. We are not cutting you off and we are not trying to rush this matter at all, but we will have to resolve it in executive session, and it is a pretty difficult question which we have in front of us there. We hate it on your account because you have certainly done everything humanly possible to expedite this matter, but we will take it up in executive session.

Thank you so very much.

Mr. SISK. I thank you deeply and appreciate it, Mr. Chairman.

Mr. DAVIS. Are those gentlemen from Wisconsin here?

Mr. WITHROW. No. Unfortunately they tre back in Wisconsin, but I understand the Army engineers are prepared to make their statement on it and they have a report.

Mr. DAVIS. What project is involved here?

Mr. WITHROW. Upper Fox River in Wisconsin.

Mr. DAVIS. The Upper Fox River in Wisconsin. Mr. Brennan is anybody prepared on that?

General ITSCHNER. Mr. Heller is prepared to discuss this problem.

Mr. DAVIS. Our assistant clerk says this is a navigation project and should come before the Committee on Rivers and Harbors. Is that correct? Is it a navigation project or do you have any flood features in it?

General ITSCHNER. It is really a navigation project.

Mr. DAVIS. Then we will have to ask John Blatnik to take it up because it comes before his committee.

Mr. WITHROW. I did not know very much about the project but I did think it had flood-control aspects.

General ITSCHNER. It has a very slight amount. It is really primarily a navigation project.

Mr. DAVIS. I would like the record to show at this point that we do deeply appreciate the fine and efficient assistance given us by Mrs. Margaret Beiter, our longtime assistant chief clerk. She has a thorough grasp of everything that comes before this committee and has been most helpful to us. I want her to know it and I know that the committee wants it as a part of the printed record. We just cannot say too much complimentary about her.

Of course, she had good training under Mr. McGann down there. sitting by Mr. Rund, our reporter. While I am about it we want to express appreciation to everybody who is assisting us—General Itschner and all of his assistants, military and civilian. We have

said too much about Joe Brennan now. I am afraid they may fire him. Mr. McConnell has been attentive at our sessions, and Mr. Rund, our official reporter, has been most cooperative.

Mr. DEMPSEY. What about your colleagues?

Mr. DAVIS. I have tried to say over and over how much the Chair appreciates the thorough and faithful cooperation of my colleagues on this committee. I have said that I do not think there is a subcommittee in the entire House of Representatives that works more diligently and more patiently and more continuously, and I think more intelligently than this one, which is dedicated to one purpose and one purpose alone, and that is in our best judgment to do the best service we can to the Nation as a whole regardless of the section of the country or regardless of political affiliation.

I have imposed on you to listen to that speech, but I feel you will have to appear before the other committee, Mr. Withrow.

Now we will hear a quick statement from Mr. Avery. He is here, is he not?

TUTTLE CREEK RESERVOIR (H. R. 11400)

STATEMENT OF HON. WILLIAM H. AVERY, MEMBER OF CONGRESS FROM THE STATE OF KANSAS—Resumed

Mr. AVERY. Yes, sir, Mr. Chairman.

Mr. DAVIS. I wish you would make a general statement because we are going into executive session immediately on the conclusion of this statement, in connection with your bill which we discussed yesterday, and which we will again discuss in executive session.

Mr. AVERY. That is right, Mr. Chairman. Certainly in view of your remarks to me before the committee came to order I assure you I will not consume very much time of the committee here.

Mr. DAVIS. I think I should clear it up by saying I was facetious about it but we have heard so much about Tuttle Creek and I suppose in my office, if it is still there, there are stacks and stacks of communications about Tuttle Creek for and against. That is why I said to you we have heard so much about Tuttle Creek that I hope we can finally dispose of it.

Mr. AVERY. I think, Mr. Chairman, a favorable report on this bill would probably do more to dispose of Tuttle Creek than any other one thing that can be done. As you know, as you considered the bill very briefly yesterday, it was designed to compensate businessmen for business losses they will suffer as a result of being moved as a result of the construction of Tuttle Creek Dam.

I want to point out to the committee this is a rather unusual project for two reasons. Reason No. 1 is that this is about the first time a major reservoir has been built in a highly developed agricultural area. They have been in the upper reaches of the watershed before where very few persons were being displaced. This is at the mouth of a river and in a very highly developed agricultural area. So there are excessive business losses that are to be suffered.

No. 2, these businessmen that will be displaced by this project are located right in the middle of the reservoir area. If they were out on the fringe where they might reasonably be expected to be compensated in the future for their present business losses that would

be another matter, but the whole economic basis of their livelihood is being taken away for the construction of Tuttle Creek Dam. In other words, these towns are all right in the valley and there is no place for them to move. In my opinion this bill does not go quite as far as I would like to have it go, but it does present a reasonable basis for compensation for the business losses that these few businessmen will suffer as a result of the Tuttle Creek Dam construction.

I would like to add further General Itschner and I have agreed on some minor amendments to this bill that I think will be acceptable to us and will not change the status of the bill materially.

Mr. BALDWIN. Mr. Chairman, could I ask a question?

Mr. DAVIS. Mr. Baldwin.

Mr. BALDWIN. Mr. Avery, as I understand it, this is what in accounting terms is referred to as "goodwill." In other words, the intangible value and not the physical value of the actual building that is assessed by an appraiser, but the value of a going business, which in accounting terms is listed as "goodwill," which you have sold to some other businessman and the other businessman would have to pay for it because he is buying a going enterprise. Is that right?

Mr. AVERY. I think it is a very fair appraisal, Mr. Baldwin. I think you could say it is something being taken away from them without compensation that they would have to pay for if they were to relocate themselves in another area in order to buy another business, which I think essentially says the same thing you said in your statement.

Mr. BALDWIN. How do you propose in your bill to compute this figure?

Mr. AVERY. It is tied down to a specific formula on the average earnings for 1 year over a 5-year period from 1950 to 1955. The reason why we put in 5 years there is that you can understand these businesses have been kind of withering on the vine as a result of the shadow of the construction of the dam hanging over them.

Mr. BALDWIN. You are multiplying the average earnings by five?

Mr. AVERY. No, sir; we are taking the average net earnings of a business for 5 years.

Mr. BALDWIN. In other words, you are proposing to compensate them for 1 year's average earnings?

Mr. AVERY. For 1 year's business, which I think is the very least amount of time it would take them to reestablish themselves in some other location.

Mr. BALDWIN. I see.

Mr. DAVIS. It seems to be quite a departure from existing practice, but we will take it up in executive session. Thank you, Mr. Avery. We will now go into executive session.

(Whereupon, at 10:50 a. m. the subcommittee went into executive session.)

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